

COLOR TELEVISION

Chassis No. GB-1

27U-S650

MODELS

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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ELECTRICAL SPECIFICATIONS

POWER INPUT	120V AC 60 Hz
POWER RATING	126W
PICTURE SIZE	2,187cm ² (339sq inch)
CONVERGENCE	Magnetic
SWEEP DEFLECTION	Magnetic
FOCUS	Hi-Bi-Potential Electrostatic
INTERMEDIATE FREQUENCIES	
Picture IF Carrier Frequency	45.75 MHz
Sound IF Carrier Frequency	41.25 MHz
Color Sub-Carrier Frequency	42.17 MHz
	(Nominal)
AUDIO POWER	
OUTPUT RATING	3.0W + 3.0W (at 10% distortion and Dual CH Operate)

SPEAKER
 SIZE 9 x 5 cm oval (2 pcs.)
 VOICE COIL IMPEDANCE 8 ohm at 400 Hz

ANTENNA INPUT IMPEDANCE
 VHF/UHF 75 ohm Unbalanced

TUNING RANGES
 VHF-Channels 2 thru 13
 UHF-Channels 14 thru 69
 CATV Channels 1 thru 125
 (EIA, Channel Plan U.S.A.)

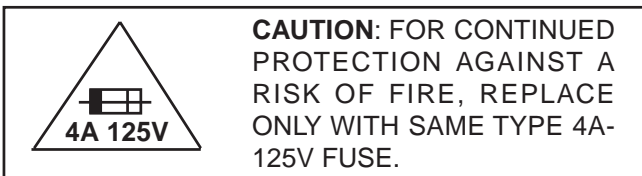
Specifications are subject to change without prior notice.

IMPORTANT SERVICE SAFETY PRECAUTION

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.
To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.



SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.
It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.
2. It is essential that servicemen have available at all times an accurate high voltage meter.
The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver.
Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

IMPORTANT SERVICE SAFETY PRECAUTION

(Continued)

BEFORE RETURNING THE RECEIVER

(Fire & Shock Hazard)

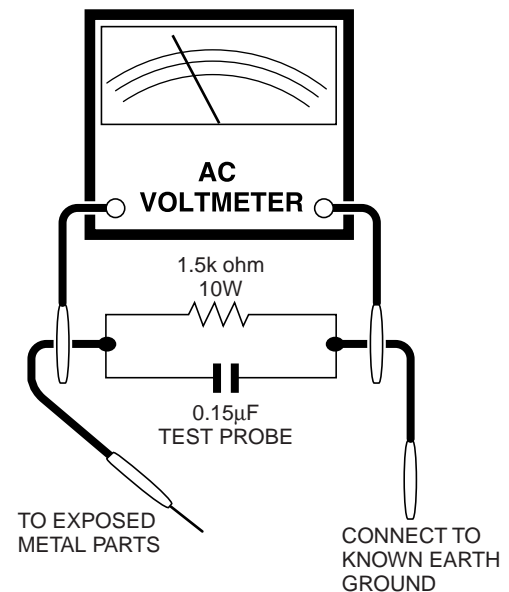
Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC cord directly into a 120 volt AC outlet, (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
 - Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.

- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC line cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)

Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



SAFETY NOTICE

Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

LOCATION OF USER'S CONTROL

Front Panel

POWER

Press → On.
Press again → Off.

SENSOR AREA FOR REMOTE CONTROL

MENU

Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

VOLUME UP/DOWN

(+) Increases sound.
(-) Decreases sound.

VIDEO **IN 2** L-AUDIO-R
(INSIDE DOOR)

CHANNEL UP/DOWN

- (▲) Selects next higher channel.
- (▼) Selects next lower channel.
- Press both at the same time to access the MAIN MENU screen.

Basic Remote Control Functions

POWER

Press → On.
Press again → Off.

REMOTE KEYPAD

Accesses any channel from keypad.

FLASHBACK

Returns to previous channel.

PERSONAL PREFERENCE

With the Personal Preference buttons, you can program your favorite programs by using the 4 categories A, B, C and D. The channels can be accessed quickly by using these buttons.

VOLUME UP/DOWN

- (+) Increases sound.
- (-) Decreases sound.
- In menu mode, changes or selects the TV adjustments.

MENU

Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

CATV/DVD-TV/VCR MODE

SELECT SWITCH

In TV/VCR position, sends power and channel select commands (Channel up/down and Random Access buttons) to the TV and VCR control.
In CATV/DVD position, sends power and channel select commands to a cable TV converter and DVD control.

DVD/VCR CONTROL

Infrared Transmitter Window

DISPLAY

Press → Displays receiving channel for four seconds.
Press again → Removes display.

- Temporarily displays receiving channel when in Closed Caption mode.

INPUT

Press → Switch to external video INPUT 1 mode.
Press 2 times → Switch to external video INPUT 2 mode.
Press 3 times → Switch to external video INPUT 3 mode or COMPONENT mode.
Press 4 times → Switch back to the original TV mode.

ENTER

Used in some instances where a Cable Converter Box requires an "enter" command after selecting channels, when using the REMOTE KEYPAD button.

CHANNEL UP/DOWN

- (▲) Selects next higher channel.
- (▼) Selects next lower channel.
- Moves the "●" mark of the MENU screens.

MUTE

Press → Mutes sound.
Press again → Restores sound.

- CLOSED CAPTION appears when sound is muted.

PIP FUNCTION

With the VIDEO inputs, you can watch two pictures at the same time.

Note:

- The above shaded buttons on the Remote Control glow in the dark. To use the glow-in-the-dark display on the remote control, place it under a fluorescent light or other lighting.
- The phosphorescent material contains no radioactive or toxic material, so it is safe to use.
- The degree of illumination will vary depending on the strength of lighting used.
- The degree of illumination will decrease with time and depending on the temperature.
- The time needed to charge the phosphorescent display will vary depending on the surrounding lighting.
- Sunlight and fluorescent lighting are the most effective when charging the display.

INSTALLATION AND SERVICE INSTRUCTIONS

- Note:** (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.
 (2) Before performing adjustments, the TV set must be on at least 15 minutes.

CIRCUIT PROTECTION

The receiver is protected by a 4.0A fuse (F701), mounted on PWB-A, wired into one side of the AC line input.

X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 120V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to TP651 and make sure that the voltmeter reads $13.2 \pm 0.7V$.
5. Apply external 16.3V DC at TP651 by using an external DC supply, TV must be shut off.
6. To reset the protector, unplug the AC cord and plug the AC cord power on. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:

1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 120V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and select the service adjustment "V18" and Bus data "01" (Y-mute on, CRT Cut Off).
4. The voltage should be approximately 29.0kV (at zero beam).
 If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

For adjustments of this model, the bus data is converted to various analog signals by the D/A converter circuit.

Note: There are still a few analog adjustments in this series such as focus and master screen voltage. Follow the steps below whenever the service adjustment is required. See "Table-B" to determine, if service adjustments are required.

1. Service mode

Before putting unit into the service mode, check that customer adjustments are in the normal mode. Use the reset function in the video adjustment menu to ensure customer controls are in their proper (reset) position.

2. Service number selection

Once in the service mode, press the Ch-up or Ch-down button on the remote controller or at the set. The service adjustment number will vary in increments of one, from "V01" to "P08". Select the item you wish to adjust.

3. Data number selection

Press the Vol-up or Vol-down button to adjust the data number.

To enter the service mode and exit service mode.

To enter the service mode manually just press and hold the Vol-down and Ch-up buttons at the same time, plug the AC cord into a wall socket.

Now the TV set is switched on and enters the service mode.

To exit the service mode, turn the television off by pressing the power button.

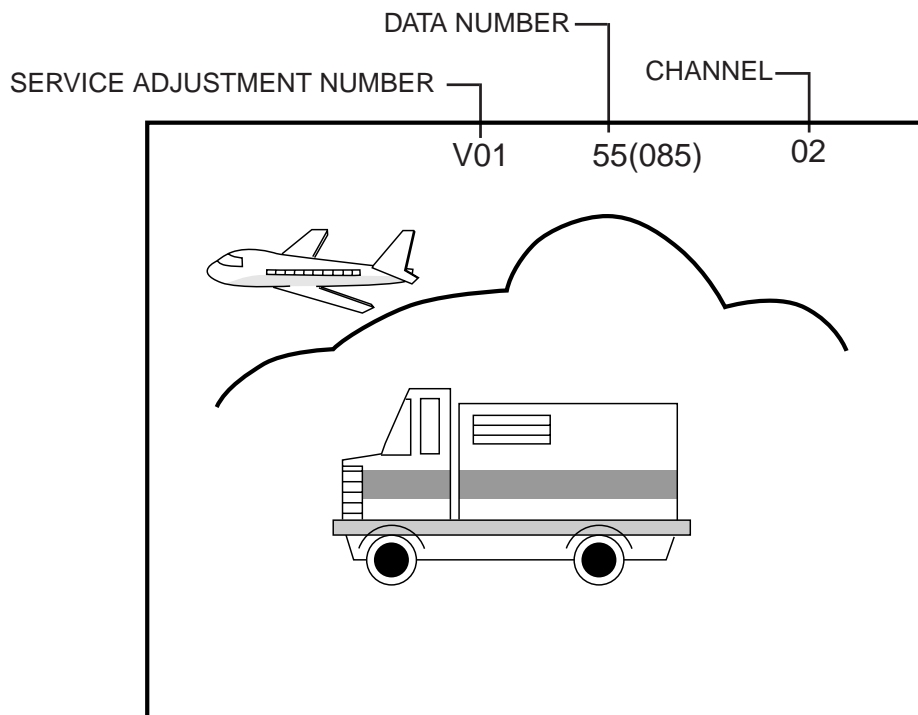


Figure A.

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		ADJUSTMENT CONTENTS
		INITIAL VALUE	RANGE	
V01	PICTURE	03	0-15(00h-0Fh)	Must be set to "10"
V02	TINT	3E	0-127(00h-7Fh)	
V03	COLOR	2D	0-127(00h-7Fh)	
V04	SUB-COLOR	10	0-31(00h-1Fh)	
V05	BRIGHT	4D	0-127(00h-7Fh)	
V06	R CUT-OFF	40	64-255(40h-FFh)	
V07	G CUT-OFF	40	64-255(40h-FFh)	
V08	B CUT-OFF	40	64-255(40h-FFh)	
V09	G DRIVE	40	0-127(00h-7Fh)	
V10	B DRIVE	40	0-127(00h-7Fh)	
V11	SHARP	14	0-63(00h-3Fh)	Must be set to "1E"
V12	N PHASE	01	0-3(00h-03h)	Must be set to "01"
V13	DC RESTORATION	00	0-3(00h-03h)	Must be set to "03"
V14	BLACK STRETCH	03	0-3(00h-03h)	Must be set to "03"
V15	ABL START POINT	03	0-3(00h-03h)	Must be set to "03"
V16	ABL GAIN	02	0-3(00h-03h)	Must be set to "02"
V17	γ POINT	00	0-3(00h-03h)	Must be set to "02"
V18	Y-MUTE/V-STOP	00	0-2	"00"=Normal, "01"=No-Y, "02"=No-Y & No-Vertical
V19	ENERGY SAVE	28	0-63(00h-3Fh)	Must be set to "28"
V24	LOW-G	F7	0-255(00h-FFh)	Must be set to "F7"
V25	LOW-B	E8	0-255(00h-FFh)	Must be set to "E8"
V26	ML-G	00	0-255(00h-FFh)	Must be set to "00"
V27	ML-B	F9	0-255(00h-FFh)	Must be set to "F9"
V28	HIGH-G	03	0-255(00h-FFh)	Must be set to "03"
V29	HIGH-B	06	0-255(00h-FFh)	Must be set to "06"
V30	WPS	01	0-1	Must be set to "01"
V31	RGB CONTRAST	20	0-63(00h-3Fh)	Must be set to "31"
V32	Y-DL	02	0-7(00h-07h)	Must be set to "02"
V33	Y-DL-INPUT	01	0-7(00h-07h)	Must be set to "01"
V34	VSM GAIN	07	0-7(00h-07h)	Must be set to "07"
V35	N COMB	01	0-1	Must be set to "01"
V36	BPF/TOF-INPUT	00	0-1	Must be set to "01"
V37	CORING	00	0-1	Must be set to "00"
V38	VSM PHASE	00	0-1	Must be set to "00"
V39	COLOR γ	00	0-1	Must be set to "01"
V40	SHARP-INPUT	14	0-63(00h-3Fh)	Must be set to "1E"
V41	TINT-INPUT	3E	0-127(00h-7Fh)	Must be set to "10"
V42	PICTURE-COMPONENT	03	0-15(00h-0Fh)	
V43	TINT-COMPONENT	10	0-31(00h-1Fh)	
V44	COLOR-COMPONENT	30	0-127(00h-7Fh)	
V45	BRIGHT-COMPONENT	4A	0-127(00h-7Fh)	
V46	R CUT OFF-COMPONENT	40	64-255(40h-FFh)	
V47	G CUT OFF-COMPONENT	40	64-255(40h-FFh)	
V48	B CUT OFF-COMPONENT	40	64-255(40h-FFh)	
V49	G DRIVE-COMPONENT	40	0-127(00h-7Fh)	
V50	B DRIVR-COMPONENT	40	0-127(00h-7Fh)	
V51	SHARP COMPONENT	14	0-63(00h-3Fh)	Must be set to "1E"
V52	N PHASE-COMPONENT	01	0-3(00h-03h)	Must be set to "01"
V53	C-TRAP	00	0-1	Must be set to "00"
R01	RF-AGC	24	0-63(00h-3Fh)	Must be set to "5C"
R02	PIF VCO coil	—		
R03	RF-AGC REF	5C	0-255(00h-FFh)	
D01	V POSITION	00	0-7(00h-07h)	
D02	H POSITION	10	0-31(00h-1Fh)	
D03	V SIZE	12	0-63(00h-3Fh)	
D04	H SIZE	1F	0-63(00h-3Fh)	
D05	V-LINEARITY	07	0-15(00h-0Fh)	
D06	V-S CORRECTION	08	0-15(00h-0Fh)	

Table - A

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		ADJUSTMENT CONTENTS
		INITIAL VALUE	RANGE	
D07	EW PARABOLA	21	0-63(00h-3Fh)	Must be set to "21"
D08	EW TRAPEZIUM	0E	0-31(00h-1Fh)	Must be set to "0E"
D09	EW CORNER	0C	0-15(00h-0Fh)	Must be set to "0C"
D10	AFC GAIN	02	0-3(00h-03h)	Must be set to "02"
D11	V EHT	07	0-7(00h-07h)	Must be set to "04"
D12	H EHT	03	0-7(00h-07h)	Must be set to "04"
EX1	FAO VOLUME	24	0-50(00h-32h)	Must be set to "24"
EX2	CC-POSITION	21	0-127(00h-7Fh)	
EX3	INT	7A	0-255(00h-FFh)	Must be set to "7A"
EX4	A-ATT	5A	0-127	
EX5	TUNER data	00	0-3(00h-03h)	Must be to "00"
EX6	SYNC SLICE LEVEL	36	0-255(00h-FFh)	Must be to "36"
OP1	OPTION1	F7	0-255(00h-FFh)	Must be set to "F5"
OP2	OPTION2	F9	0-7(00h-07h)	Must be set to "10"
OP3	OPTION3	0F		Must be set to "0E"
M01	INPUT LEVEL	09	0-15(00h-0Fh)	Must be set to "09"
M02	MTS VCO	24	0-63(00h-3Fh)	
M03	FILTER	1F	0-63(00h-3Fh)	
M04	WIDEBAND	18	0-63(00h-3Fh)	
M05	SPECTRAL	10	0-63(00h-3Fh)	

Table - A

Holding down both the VOL-up and CH-up buttons on the TV set at service mode for more than 2 seconds will automatically write the above initial values into IC2102.

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
IC2001		X	Data is stored in IC2102.
IC201	X		The adjustment is needed to compensate for characteristics of parts including IC201 and MTS level (M01).
IC2102	X		Holding down both the VOL-up and CH-up buttons on the TV set in the service mode for more than 2 seconds will automatically write the above initial values into IC2102. Then perform a complete adjustment.
CRT	X		Adjust items related to picture tube only.
IC3001	X		Adjust items related to MTS only (M01~M20).

Table - B

SERVICE ADJUSTMENT

RF AGC Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "R01".
3. Set the data value to point where no noise or beat appears.
4. Select another channel to confirm that no noise or beat appears.

Note 1 : You will have to come out of the service mode to select another channel.

Note 2 : Setting the data to "00" will produce a black raster.

Screen Adjustment

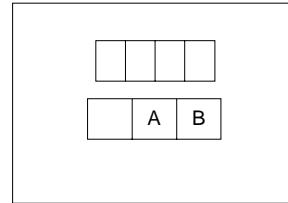
1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "V03" and set the data value to "00" to set the color level to minimum. (Record original data code under adjustment "V03" before changing) You may skip this step, if you selected a B/W picture or monoscope pattern.
3. Select the service adjustment "V18" and adjust the data value to "01", this turn off the luminance signal (Y-mute).
4. Adjust the master screen control until the raster darkens to the point where raster is barely seen.
5. Adjust the service adjustments "V06" red, "V07" green and "V08" blue to obtain a good grey scale with normal whites at low brightness level.
6. Select the service adjustment "V18" and reset data to "00". Select the service adjustment "V03" and reset data to obtain normal color level.
7. For component input, the data value of "V46" red, "V47" green and "V48" blue is adjusted to follow the data value of "V06", "V07" and "V08" respectively.
8. Reset the master screen control to obtain normal brightness range.

White Balance Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "V03" and set to "00" (minimum color)(Record original data code under adjustment "V03" before changing). "V03" does not have to be adjusted, if you selected a B/W picture or monoscope pattern.
3. Alternately adjust the service adjustment data of "V09" and "V10" until a good grey scale with normal whites is obtained. (RF Input)
4. For component input, the data value of "V49" and "V50" is adjusted to follow the data value of "V09" and "V10" respectively.
5. Select the service adjustment "V03" and reset data to obtain normal color level.

Sub-picture and Sub-Bright Adjustments

1. Receive the window pattern signal.
- RF INPUT
 2. Get into service adjustment data "V01" and "V05" and set the luminance as shown in figure "A" and "B" as below respectively.
- COMPONENT INPUT
 4. Get in service adjustment data "V42" and "V45" and set the luminance as shown in figure "A" and "B" as below respectively.



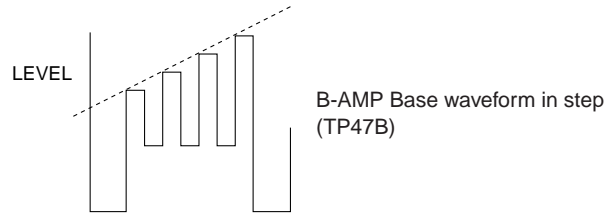
VOLTAGE CONFIRMATION

A: $86 \pm 10 \text{cd/m}^2$

B: $1.25 \pm 0.5 \text{cd/m}^2$

Sub-Tint Adjustment

1. Receive the half color bar signal.
- RF INPUT
2. Get into Y-Mute by R/C, or by setting the "V18" bus data to "01".
3. Vary the "V02" bus data until the waveform becomes as stated below.



- AV INPUT
5. Input data of "V41" to minus 5 step from "V02" data.

Sub-Color Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position .
3. Enter the service mode and select service adjustment "V03".
4. Adjust "V03" data value to obtain normal color level.

Vertical-Size and Linearity Adjustments

1. Receive a good local channel.
 2. Enter the service mode and select the service adjustment "D03" for V-size.
 3. Adjust the "D03" bus data to get the proper V-size.
 4. For V-linearity adjustment, select data bus "D05" and adjust to get the proper vertical linearity.
- Note:** Aging for 10 min before adjustment. After the adjustment of V-phase and V-size, re-adjustment for this V-line.

Vertical Phase Adjustment

1. Enter the service mode and select the service adjustment "D01".
2. Adjust "D01" data value so that picture is centered.

Horizontal Position Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "D02".
3. Adjust "D02" data value so that picture is centered.

Caption Position Adjustment (Horizontal)

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "EX2".
3. A black text box appears on the screen. (see **Figure B.** below)
4. Adjust "EX2" data value so that text box is positioned in the center of the screen.

Other Adjustments

1. Enter the service mode.
2. Adjust the following data values as listed below.

SERVICE POSITION	ADJUST ITEM	DATA(Hex)
OP1	OPTION1	F5
OP2	OPTION2	10
OP3	OPTION3	0E

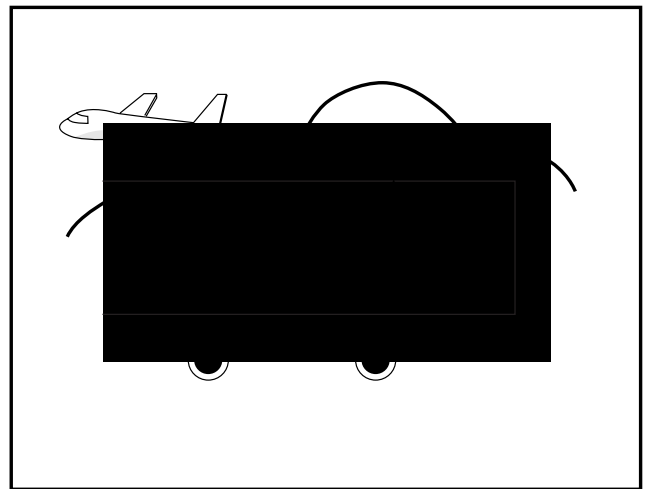


Figure B.

■ MTS ADJUSTMENT

MTS Level Adjustment

1. Receive the following composite signal.
Monaural signal: 400Hz, 100% modulation
2. Connect the rms voltmeter to pin (39) of IC3001.
3. Enter the service mode and select the service adjustment "M01" and set to "09".
4. Enter the service mode and select the service adjustment "EX4".
5. Adjust the data so that the rms voltmeter reads 490 ± 10 mVrms.

MTS VCO Adjustment

1. Keep the unit in no-signal state.
2. Connect the frequency counter to pin (39) of IC3001.
3. Connect a capacitor (100 μ F, 50V) in between positive(+) side of C3005 and ground.
4. Enter the service mode and select the service adjustment "M02"
5. Adjust the data so that the frequency counter reads 62.94 ± 0.75 kHz.

Filter Adjustment

1. Feed the following stereo pilot signal to pin (14) of IC3001 .
Stereo pilot signal: 9.4kHz, 600mVrms.
2. Enter the service mode and select the service adjustment "M03".
3. Adjust the data until "OK" appears in position on the screen. Make sure the "OK" is displayed almost at the center of the data range.

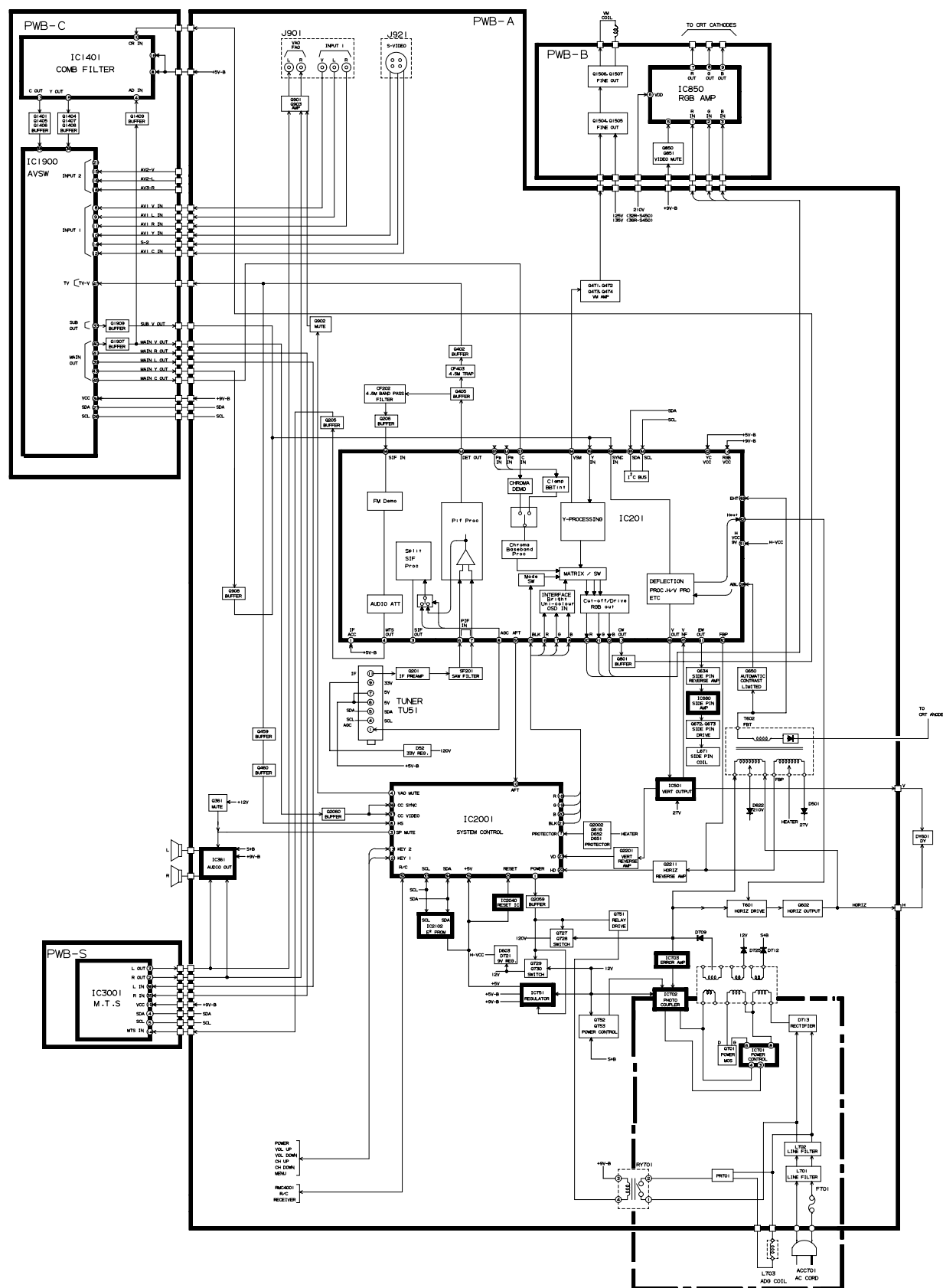
Separation Adjustment

1. Connect the rms voltmeter to pin (39) of IC3001.
2. Receive the following composite stereo signal 1.
Composite stereo signal: 30% modulation, left channel only, noise reduction on, 300Hz
3. Enter the service mode and select the service adjustment "M04".
4. Adjust the data until the AC voltage reading of the RMS voltmeter is minimum.
5. Receive the following composite stereo signal 2.
Stereo signal: 30% modulation, left channel only, noise reduction on, 3kHz
6. Enter the service mode and select the service adjustment "M05".
7. Adjust the data until the AC voltage reading of the rms voltmeter is minimum.
8. Take the above steps 1 thru 7 again for fine adjustment.

	1	2	3	4	5	6
--	---	---	---	---	---	---



BLOCK DIAGRAM



DESCRIPTION OF SCHEMATIC DIAGRAM

NOTES:

1. The unit of resistance "ohm" is omitted.
($K=k\Omega=1000\Omega$, $M=M\Omega$)
2. All resistors are 1/16 watt, unless otherwise noted.
3. All capacitors are μF , unless otherwise noted.
($P=pF=\mu\mu F$)
4. (G) indicates $\pm 2\%$ tolerance may be used.
5. $\overline{\text{---}}$ indicates line isolated ground.

VOLTAGE MEASUREMENT CONDITIONS:

1. All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 120V AC and all controls set for normal picture unless otherwise indicated.
2. All voltages measured with 1000 μ V B & W or Color signal.

WAVEFORM MEASUREMENT CONDITIONS:

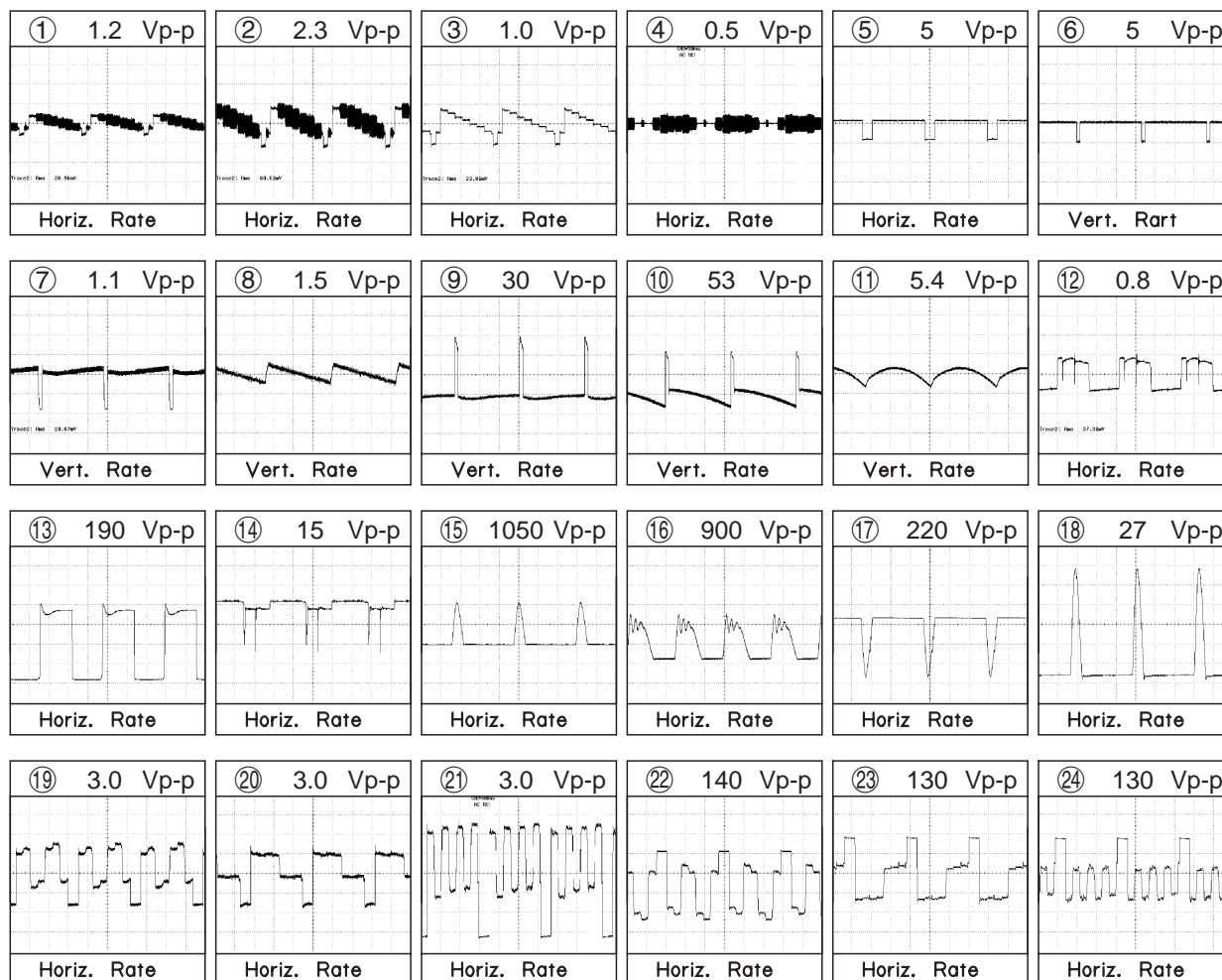
1. Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.
2. \bullet indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)

\triangle AND SHADED () COMPONENTS = SAFETY RELATED PARTS.

\blacktriangle MARK= X-RAY RELATED PARTS.

This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

WAVEFORMS

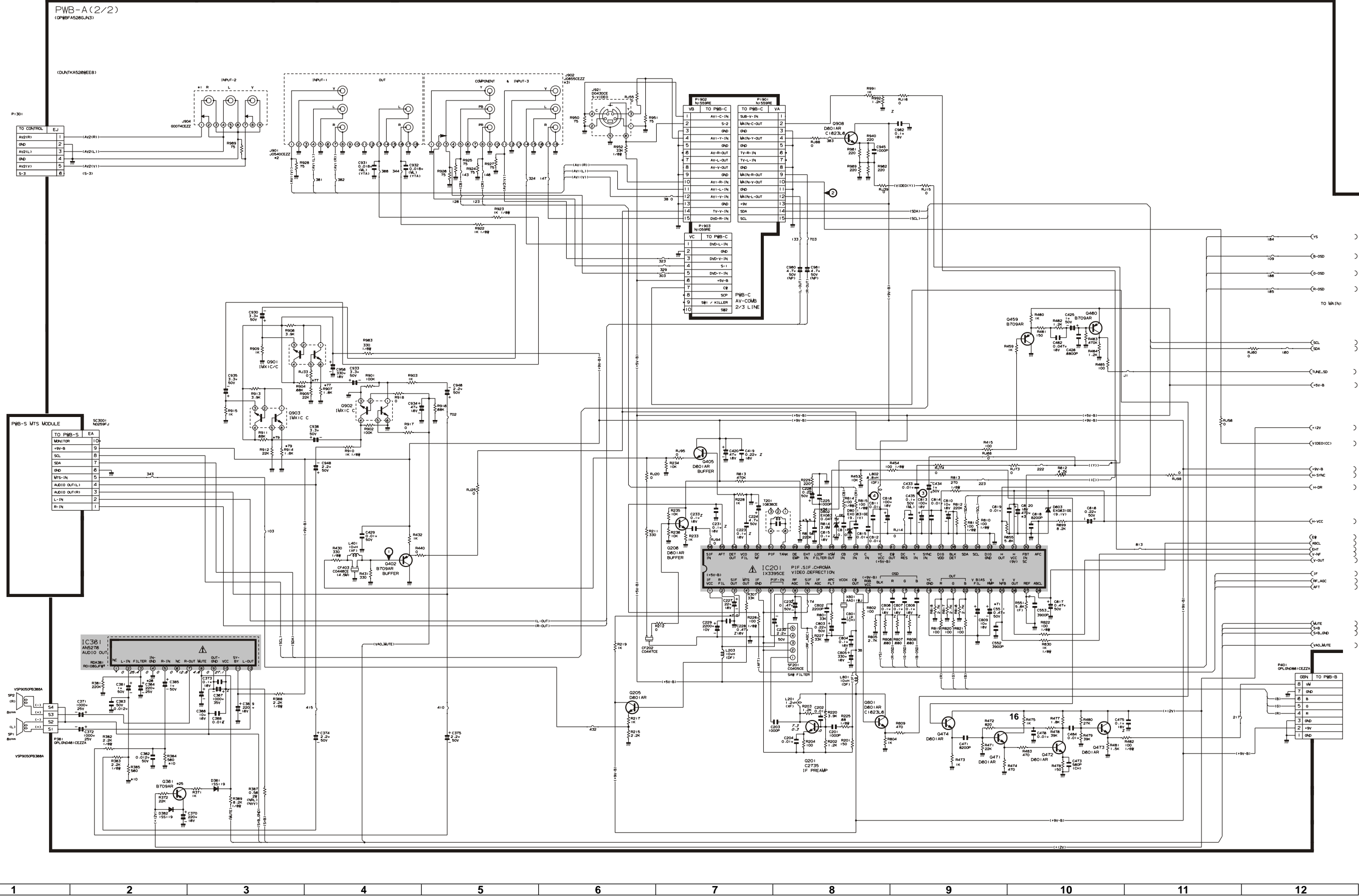


SCHEMATIC DIAGRAM: MAIN-2 Unit

MAIN2

AND SHADED COMPONENTS
= SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.

NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED
(X=1000 OHMS, M=MEG OHMS).
2. ALL RESISTORS ARE 1/8 WATT UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE P WITH PREFIX SYMBOL
(N, P, ETC.).

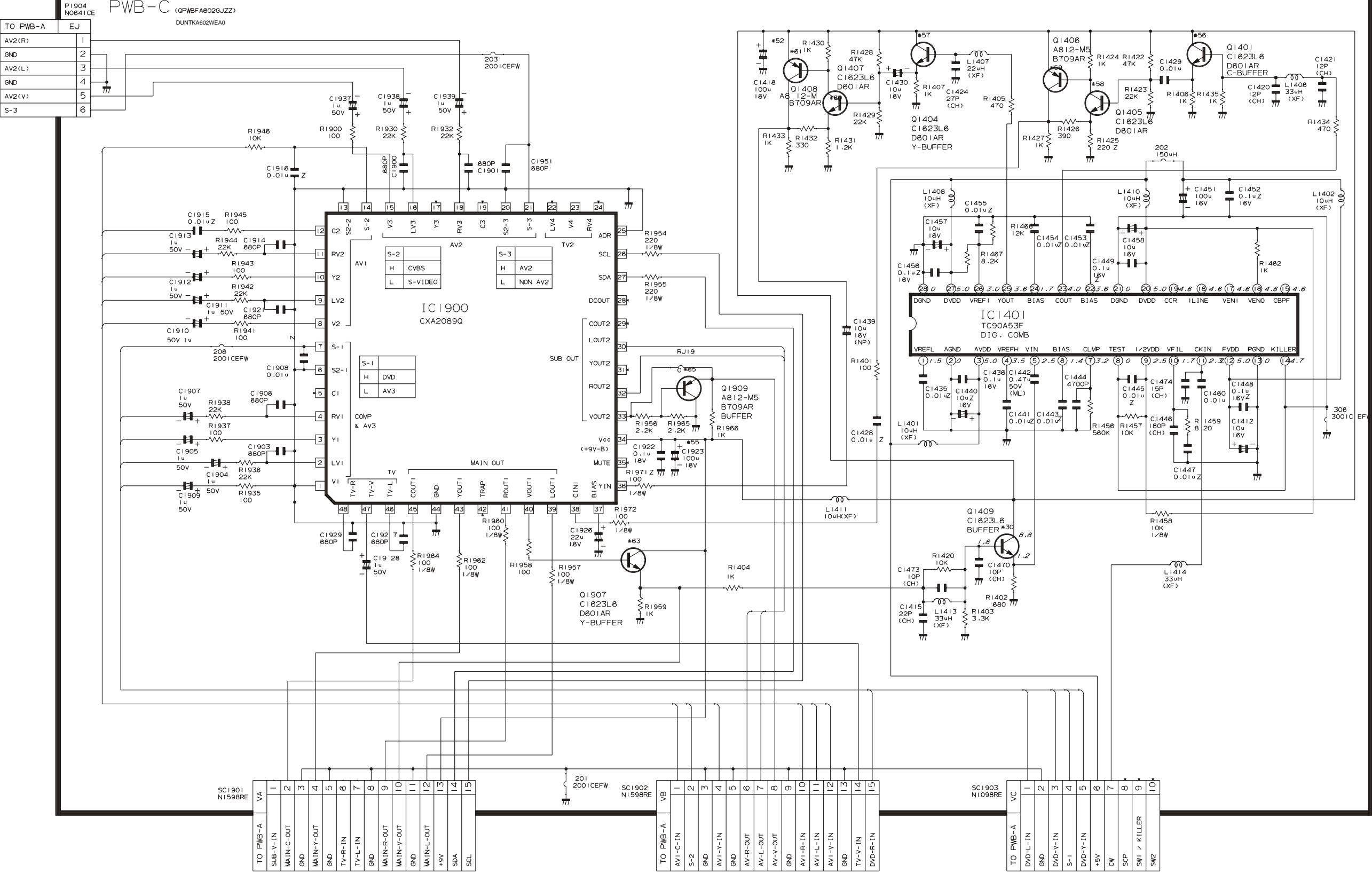


SCHEMATIC DIAGRAM: AV Unit

AV-COMB (3 LINE)

NOTE: 1. THE UNIT OF RESISTANCE *OHM* IS OMITTED
(K=1000 OHMS, M=MEGAOHM).
2. ALL RESISTORS ARE 1/8 WATT, UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u, P, ETC).

▲ AND SHADED () COMPONENTS
= SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.



SCHEMATIC DIAGRAM: CRT Unit

H

G

F

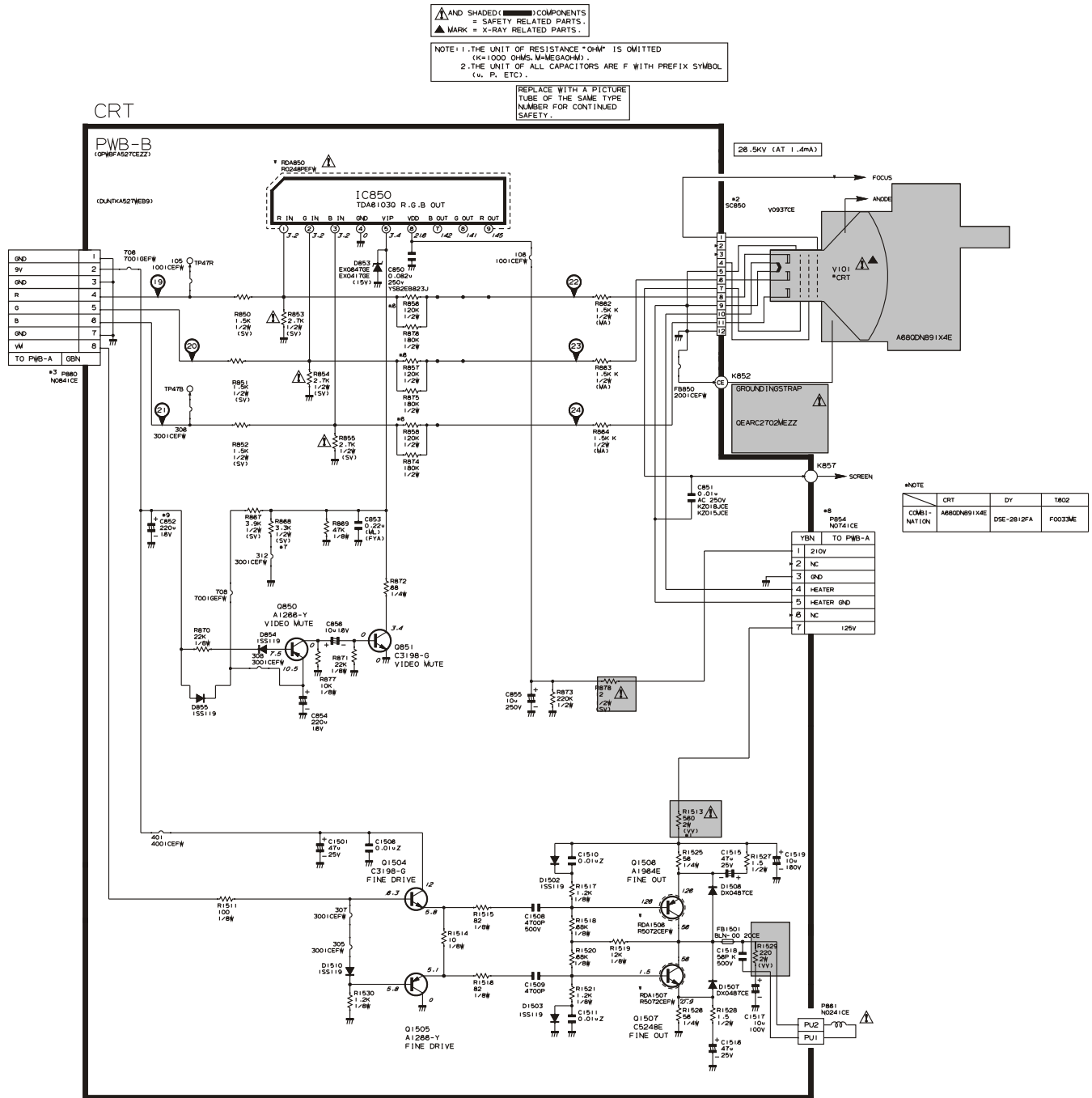
E

D

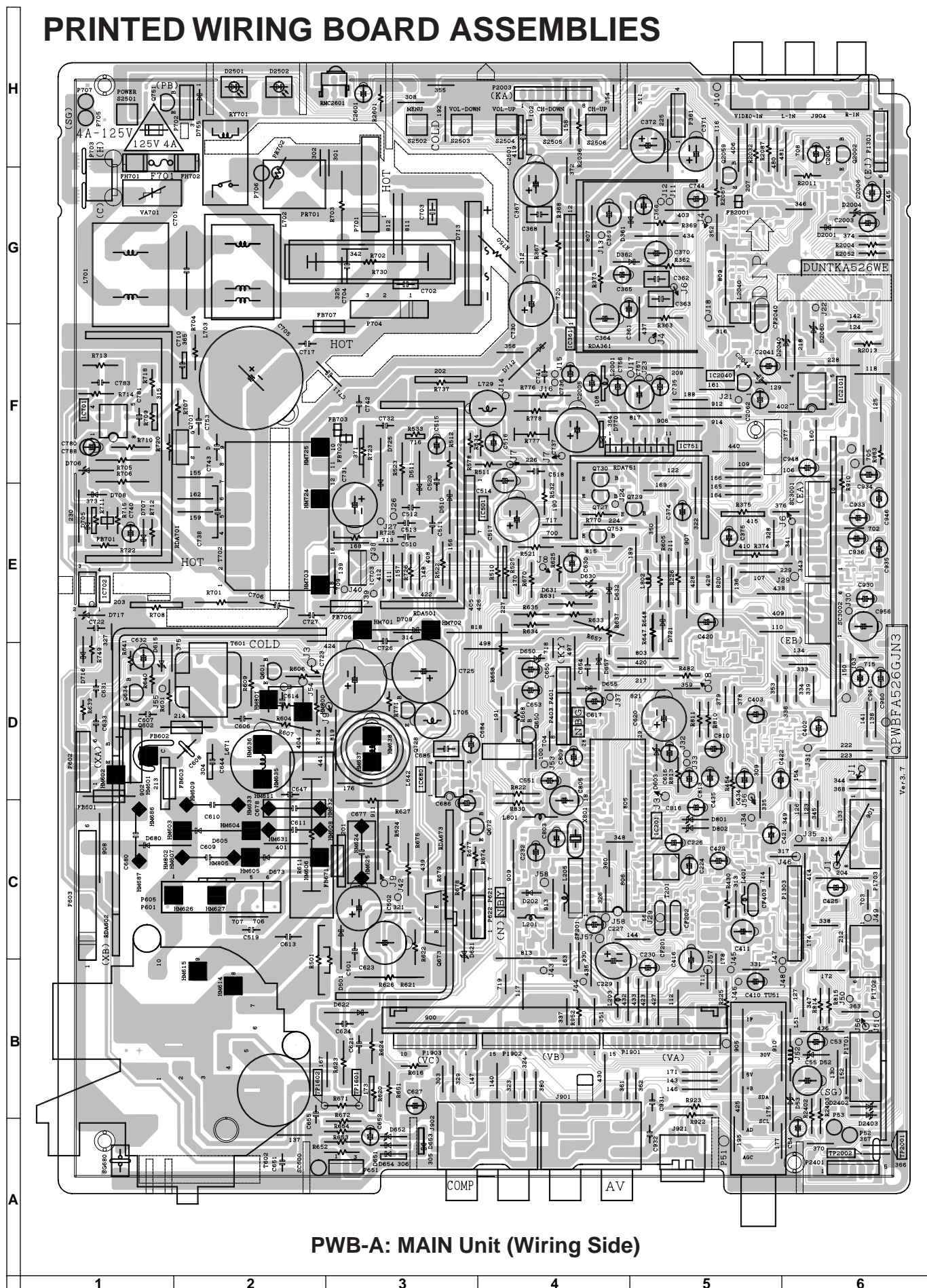
C

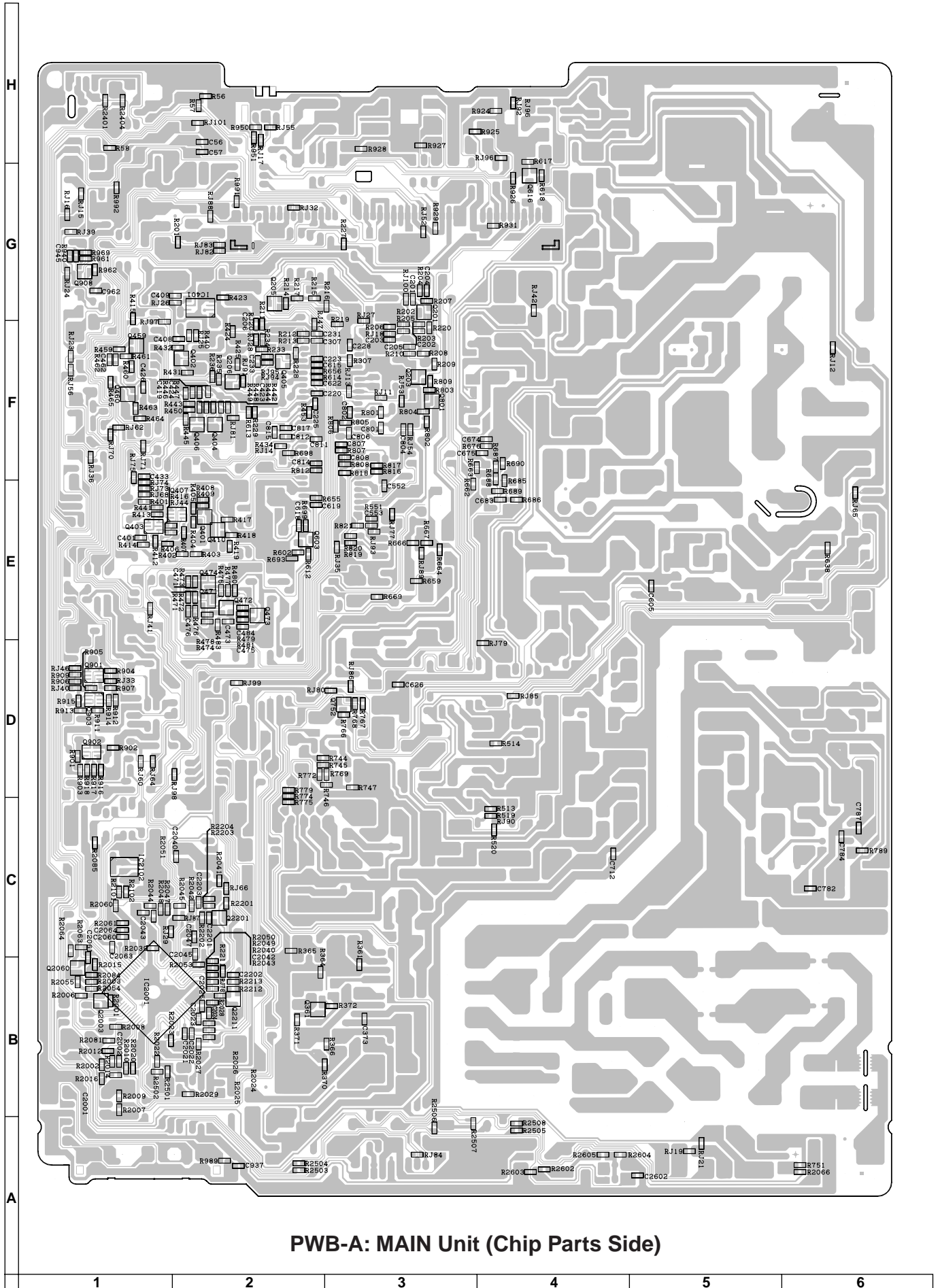
B

A



PRINTED WIRING BOARD ASSEMBLIES









H

G

F

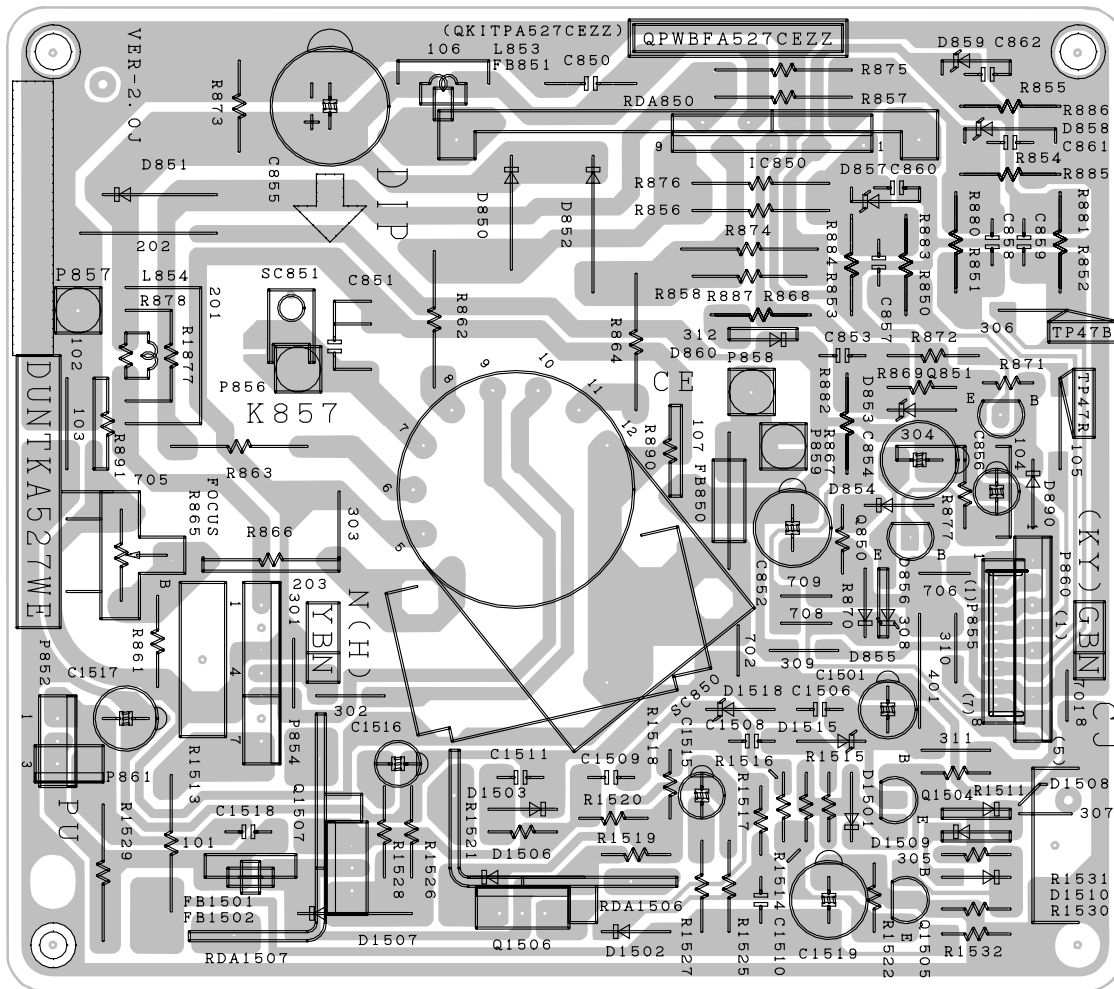
E

D

C

B


A



PWB-B: CRT Unit (Wiring Side)

PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual ; electrical components having such features are identified by  and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does not have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |




in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

▲ MARK: X-RAY RELATED PARTS

Ref. No.	Part No.	★	Description	Code
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PICTURE TUBE

▲  V101	VB68QDN891X4E		Picture Tube(With DY601)	CG
▲  L703	RCiLG0038GEZZ		Degaussing Coil	AN
	LHLDW0102GJKZ	X	Wire Holder, x6	AC
	MSPRT0002MEZZ		Spring	AE
▲ 	QEARC2702MEZZ		Grounding Strap	AD

Ref. No.	Part No.	★	Description	Code
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PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

PWB-A DUNTKA526WEE8	—	MAIN Unit	—
PWB-B DUNTKA527WEB9	—	CRT Unit	—
PWB-C DUNTKA602WEA0	—	AV Unit	—
PWB-S DUNTKB224WEA2	—	MTS MODULE Unit	—


PWB-A: DUNTKA526WEE8 MAIN UNIT

TUNER


NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

▲  TU51	VTUVTST5UF740	X	Tuner	AX
	or			
	VTUENV56DA1G63			

INTEGRATED CIRCUITS

▲  IC201	RH-iX3395CEN2	J	TB1252CN	AY
IC361	VHiAN5276//-1	J	AN5276	AR
IC501	VHiTA8427K/-1	J	TA8427K	AL
IC701	VHiTEA1507/-1	J	TEA1507P/N1	AL
IC702	RH-FX0008GEZZ	J	PC123FY8	AE
IC703	VHiSE120N//-1	J	SE120N	AG
IC751	VHiSTV8164+-1	X	I.C.	AM
IC2001	RH-iXA192WJZZ	X	TMPA8700CSF	
IC2040	VHiKIA7045A-1	J	KIA7045AP	AE
	or			
	VHiKIA7045P-1			
IC2101	VHiM24C16B/-1	J	M24C16-BN6	AG

TRANSISTORS

Q201	VS2SC2735//1E	J	2SC2735	AC
Q205	VS2PD601AR/-1	J	2PD601AR	AB
Q206	VS2PD601AR/-1	J	2PD601AR	AB
Q361	VS2PB709AR/-1	J	2PB709AR	AB
Q402	VS2PB709AR/-1	J	2PB709AR	AB
Q405	VS2PD601AR/-1	J	2PD601AR	AB
Q459	VS2PB709AR/-1	J	2PB709AR	AB
Q460	VS2PB709AR/-1	J	2PB709AR	AB
Q471	VS2PD601AR/-1	J	2PD601AR	AB
Q472	VS2PD601AR/-1	J	2PD601AR	AB
Q473	VS2PD601AR/-1	J	2PD601AR	AB
Q474	VS2PD601AR/-1	J	2PD601AR	AB
Q601	VS2SC2482//-1	J	2SC2482	AD
▲  Q602	VS2SD2634++-F		2SD2634++	
	or			
	VS2SD2539//1E			
Q616	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			

Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA526WEE8				
MAIN UNIT				
Q650	VS2SA1266-Y-1	J	2SA1266-Y	AA
△ Q701	VSST6NC60FP1E		ST6NC60FP	
	or			
	VSST6NK60FP			
Q727	VS2SC3333//-1	J	2SC3333	AG
Q728	VS2SA1091-O1A	J	2SA1091	AA
Q729	VS2SA1266-Y-1	J	2SA1266-Y	AA
Q730	VS2SC3198-G-1	J	2SC3198-G	AA
Q751	VS2SC3198-G-1	J	2SC3198-G	AA
Q752	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q753	VS2SC3198-G-1	J	2SC3198-G	AA
Q801	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q901	VSiMX1C/C//-1	J	IMX1C/C	AB
Q902	VSiMX1C/C//-1	J	IMX1C/C	AB
Q903	VSiMX1C/C//-1	J	IMX1C/C	AB
Q908	VS2PD601AR/-1	J	2PD601AR	AB
Q2002	VS2SA1266-Y-1	J	2SA1266-Y	AA
Q2059	VS2SC3198-G-1	J	2SC3198-G	AA
Q2060	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q2201	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q2211	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
DIODES				
D52	RH-EX0676GEZZ	J	Zener Diode, 32V	AA
D53	RH-EX0619GEZZ	J	Zener Diode, 6.2V	AA
D361	VHD1SS119//-1	J	Diode	AB
D362	VHD1SS119//-1	J	Diode	AB
△ D501	RH-DX0131CEZZ	J	Diode	AC
D510	RH-DX0441CEZZ	J	Diode	AC
D511	RH-EX0654CEZZ	J	Zener Diode, 75V	AD
D603	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D621	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
△ D622	RH-DX0131CEZZ	J	Diode	AC
D650	RH-EX0628GEZZ	J	Zener Diode, 8.2V	AC
▲ △ D651	VHD1SS244//-1	J	Diode	AB
	or			
	VHD1SS82///-1			
▲ △ D652	RH-EX0641GEZZ	J	Zener Diode, 12V	AA
▲ △ D653	VHD1SS119//-1	J	Diode	AB
D657	VHD1SS119//-1	J	Diode	AB
D707	VHD1SS119//-1	J	Diode	AB
	or			
	VHD1SS244//-1			
D708	VHD1SS119//-1	J	Diode	AB
	or			
	VHD1SS244//-1			
△ D709	RH-DX0229CEZZ	J	Diode	AF
△ D712	RH-DX0468CEZZ	J	Diode	AE
△ D713	RH-DX0477CEZZ	J	Diode	AF
D716	VHD1SS119//-1	J	Diode	AB
D717	RH-EX0650GEZZ	J	Zener Diode, 16V	AB
D721	VHD1SS119//-1	J	Diode	AB
	or			
	VHD1SS244//-1			
△ D725	RH-DX0407CEZZ		Diode	
	or			
	RH-DX0468CEZZ			
D755	VHD1SS119//-1	J	Diode	AB
D801	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D802	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D2402	RH-EX0619GEZZ	J	Zener Diode, 6.2V	AA

Ref. No.	Part No.	★	Description	Code
D2403	RH-EX0619GEZZ	J	Zener Diode, 6.2V	AA
△ VA701	RH-VX0019CEZZ	J	Varistor	AC
	or			
	RH-VX0048CEZZ			
	or			
	RH-VX0035CEZZ			
PACKAGED CIRCUITS				
△ PR702	RMPTP0092CEZZ	J	Packaged Circuit	AH
X801	RCRSAA011WJZZ	X	Crystal	AG
	or			
	RCRSB0278CEZZ			
FILTERS AND COILS				
CF202	RFiLC0447CEZZ	J	Ceramic Filter	AD
CF403	RFiLC0446CEZZ	J	Ceramic Filter	AD
CF2040	RFiLA0099CEZZ	J	Ceramic Filter	AE
L51	VP-CF270K0000	J	Peaking 27μH	AB
L201	VP-XF1R2K0000	J	Peaking 1.2μH	AB
L203	VP-DF100K0000	J	Peaking 10μH	AB
L401	VP-XF100K0000	J	Peaking 10μH	AB
L642	RCiLZ0102MEZZ	J	Coil	AH
△ L701	RCiLF0313CEZZ	J	Coil	AH
	or			
	RCiLF0273CEZZ			
△ L702	RCiLF0025PEZZ	R	Coil	AK
	or			
	RCiLF0313CEZZ			
	or			
	RCiLF0273CEZZ			
L705	RCiLP0179CEZZ	J	Coil	AD
L729	RCiLP0179CEZZ	J	Coil	AD
L801	VP-DF100K0000	J	Peaking 10μH	AB
L802	VP-DF6R8K0000	J	Peaking 6.8μH	AB
L2040	RCiLB0131CEZZ	J	Oscillation Coil	AE
SF201	RFiLC0405CEZZ	J	SAW Filter	AH
TRANSFORMERS				
T201	RCiLi0636CEZZ	X	IF Coil	AH
△ T601	RTRNZ0057PEZZ	R	Transformer	AK
▲ △ T602	RTRNF0033MEZZ		H-Volt Transformer	
△ T702	RTRNWA064WJZZ		Transformer	
	or			
	RTRNWA005GJN1			
	or			
	RTRNWA005GJZZ			
CAPACITORS				
<i>[EL... Electrolytic, M-Poly... Metalized Polypro Film]</i>				
C53	VCEA0A1HW105M	J	1 50V EL.	AB
C54	VCEA0A1HW475M	J	4.7 50V EL.	AB
C55	VCEA0A0JW338M	J	3300 6.3V EL.	AD
C201	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C202	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C203	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C204	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C223	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C224	VCEA0A1HW475M	J	4.7 50V EL.	AB
C225	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C226	VCEA0A1HW224M	J	0.22 50V EL.	AB
C227	VCEA0A1CW226M	J	22 16V EL.	AB
C228	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C229	VCEA0A1AW228M	J	2200 10V EL.	AD
C230	VCEA0A1HW225M	J	2.2 50V EL.	AB
C231	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C232	VCEA0A1HW474M	J	0.47 50V EL.	AB
C233	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C361	VCEA0A1HW105M	J	1 50V EL.	AB
C362	VCQYTA1HM123J	J	0.012 50V Mylar	AA
C363	VCQYTA1HM123J	J	0.012 50V Mylar	AA
C364	VCEA0A1EW227M	J	220 25V EL.	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA526WEE8									
MAIN UNIT									
C365	VCEA0A1HW105M	J	1 50V EL.	AB					
C366	VCEA0A1CW106M	J	10 16V EL.	AB					
C367	VCEA0A1VW108M	J	1000 35V EL.	AD					
C368	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA					
C369	VCEA0A1CW227M	J	220 16V EL.	AC					
C370	VCEA0A1CW227M	J	220 16V EL.	AC					
C371	VCEA0A1EW108M	J	1000 25V EL.	AD					
C372	VCEA0A1EW108M	J	1000 25V EL.	AD					
C373	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C374	VCEA0A1HW225M	J	2.2 50V EL.	AB					
C375	VCEA0A1HW225M	J	2.2 50V EL.	AB					
C419	VCKYCY1CF224Z	J	0.22 16V Ceramic	AA					
C420	VCEA0A1CW476M	J	47 16V EL.	AB					
C425	VCEA0A1HW105M	J	1 50V EL.	AB					
C426	VCKYCY1HB682K	J	6800p 50V Ceramic	AA					
C429	VQYTA1HM103J	J	0.01 50V Mylar	AA					
C433	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C434	VCEA0A1HW105M	J	1 50V EL.	AB					
C435	VQYTA1HM104J	J	0.1 50V Mylar	AA					
C462	VCKYCY1CB473K	J	0.047 16V Ceramic	AA					
C471	VCKYCY1HB822K	J	8200p 50V Ceramic	AB					
C473	VCCCCY1HH561J	J	560p 50V Ceramic	AB					
C475	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C476	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C484	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C501	VCKYPA2HB102K	J	1000p 500V Ceramic	AA					
C502	VCEA0A1VW108M	J	1000 35V EL.	AD					
C510	VCFYSA1JB564J	J	0.56 63V Mylar	AE					
C511	VCKYPA2HB391K	J	390p 500V Ceramic	AA					
C512	VQYTA1HM473J	J	0.047 50V Mylar	AA					
C513	VQYTA1HM103J	J	0.01 50V Mylar	AA					
C514	VCEA0A1VW107M	J	100 35V EL.	AC					
C515	VCEACA1HC225J	J	2.2 50V EL.	AC					
C516	VCEACA1HC105J	J	1 50V EL.	AB					
C517	VCEA0A1VW108M	J	1000 35V EL.	AD					
C519	VCFYSA1JB473J	J	0.047 63V Mylar	AC					
C551	VCFYFA1HA474J	J	0.47 50V Mylar	AC					
C552	VCKYCY1HB392K	J	3900p 50V Ceramic	AA					
C553	VCKYCY1HB392K	J	3900p 50V Ceramic	AA					
C606	VCKYPA2HB561K	J	560p 500V Ceramic	AA					
C607	VCKYPA1HB472K	J	4700p 50V Ceramic	AA					
▲▲ C609	VCFPFD3ZA802H		8000p 1.8kV M-Poly.						
▲▲ C610	VCFPFD3ZA802H		8000p 1.8kV M-Poly.						
C614	VCKYPA2HB102K	J	1000p 500V Ceramic	AA					
C615	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C616	VCEA0A1HW224M	J	0.22 50V EL.	AB					
C617	VCEA0A1HW474M	J	0.47 50V EL.	AB					
C618	VCKYCY1HB822K	J	8200p 50V Ceramic	AB					
C619	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C620	VCEA0A1CW477M	J	470 16V EL.	AC					
C623	VCEA4A2EN106M	J	10 250V EL.	AD					
C624	VCKYPA2HB102K	J	1000p 500V Ceramic	AA					
C627	VCEA0A1HW106M	J	10 50V EL.	AB					
C644	VCFPVC2DB514J	J	0.51 200V M-Poly.						
C647	VCKYPA2HB102K	J	1000p 500V Ceramic	AA					
C650	VCEA0A1HW105M	J	1 50V EL.	AB					
C651	VQYTA2AA104K	J	0.1 100V Mylar	AB					
C652	VCEA0A1VW476M	J	47 35V EL.	AB					
C653	VCEA0A1VW226M	J	22 35V EL.	AB					
C654	VCFYFA1HA334J	J	0.33 50V Mylar	AB					
▲ C701	RC-FZ036SCEZZ	J	0.01 AC125V Plastic	AC					
	or								
	RC-FZ028SCEZZ		0.01 AC125V Plastic						
	or								
	RC-FZ020SCEZZ		0.01 AC125V Plastic						
	or								
	RC-FZ037SCEZZ		0.22 AC125V Plastic						
	or								
	RC-FZ029SCEZZ		0.22 AC125V Plastic						
	or								
	RC-FZ021SCEZZ		0.22 AC125V Plastic						
C702	RC-KZ0029CEZZ	J	0.01 500V Ceramic	AC					
C703	RC-KZ0029CEZZ	J	0.01 500V Ceramic	AC					
▲ C705	RC-EZ0800CEZZ	J	560 200V EL.	AQ					
C706	RC-KZ021SCEZZ	J	3300p 2kV Ceramic	AE					
C710	RC-KZ0040CEZZ	J	560p 2kV Capacitor	AD					
C711	RC-KZ021SCEZZ	J	3300p 2kV Ceramic	AE					
C712	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C717	VCKYPA2HB472K	J	4700p 500V Ceramic	AB					
C722	VQYTA1HM104J	J	0.1 50V Mylar	AA					
▲ C723	RC-EZ0724CEZZ	J	100 160V EL.	AG					
▲ C725	RC-EZ0810CEZZ	J	330 160V EL.	AH					
C726	VCKYPH3DB561K	J	560p 2kV Ceramic	AC					
C727	VCKYPH3DB561K	J	560p 2kV Ceramic	AC					
C730	VCEA4A1VN108M	J	1000 35V EL.	AD					
C731	RC-EZ0385CEZZ	J	1000 10V EL.	AE					
C732	VCKYPA2HB102K	J	1000p 500V Ceramic	AA					
C735	VCEA0A1CW106M	J	10 16V EL.	AB					
C736	VCEA0A1CW106M	J	10 16V EL.	AB					
C737	VCEA0A1CW107M	J	100 16V EL.	AC					
C738	VCFPVC3CA452H	J	4500p 1.6kV M-Poly.						
C740	VCEA0A1EW476M	J	47 25V EL.	AB					
C741	VCKYPA2HB102K	J	1000p 500V Ceramic	AA					
C742	VCKYPA2HB102K	J	1000p 500V Ceramic	AA					
C756	VCEA0A1CW476M	J	47 16V EL.	AB					
C757	VCEA0A1CW476M	J	47 16V EL.	AB					
C780	VCEA9M1EW226M	J	22 25V EL.	AB					
C781	VCFYFA1HA334J	J	0.33 50V Mylar	AB					
C784	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA					
C787	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA					
C801	VCCCCY1HH110J	J	11p 50V Ceramic	AA					
C802	VCKYCY1HB222K	J	2200p 50V Ceramic	AA					
C803	VCEA0A1HW224M	J	0.22 50V EL.	AB					
C804	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C805	VCEA0A1CW337M	J	330 16V EL.	AC					
C806	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C807	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C808	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C809	VCEA0A1CW106M	J	10 16V EL.	AB					
C810	VCEA0A1CW106M	J	10 16V EL.	AB					
C811	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C812	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C813	VCEA0A1CW107M	J	100 16V EL.	AC					
C814	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C815	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C816	VCEA0A1CW107M	J	100 16V EL.	AC					
C817	VCKYCY1HB103K	J	0.01 50V Ceramic	AA					
C930	VCEA0A1HW335M	J	3.3 50V EL.	AB					
C931	VQYTA1HM183J	J	0.018 50V Mylar	AB					
C932	VQYTA1HM183J	J	0.018 50V Mylar	AB					
C933	VCEA0A1HW335M	J	3.3 50V EL.	AB					
C934	VCEA0A1CW476M	J	47 16V EL.	AB					
C935	VCEA0A1HW335M	J	3.3 50V EL.	AB					
C936	VCEA0A1HW335M	J	3.3 50V EL.	AB					
C945	VCKYCY1HB102K	J	1000p 50V Ceramic	AA					
C946	VCEA0A1HW225M	J	2.2 50V EL.	AB					
C948	VCEA0A1HW225M	J	2.2 50V EL.	AB					
C956	VCEA0A1CW337M	J	330 16V EL.	AC					
C960	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB					
C961	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB					
C962	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C2001	VCCCCY1HH331J	J	330p 50V Ceramic	AA					
C2003	VCEA0A1HW106M	J	10 50V EL.	AB					
C2004	VCEA0A1CW476M	J	47 16V EL.	AB					
C2005	VCEA0A1CW106M	J	10 16V EL.	AB					
C2040	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C2041	VCEA0A1HW105M	J	1 50V EL.	AB					
C2060	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					
C2061	VCCCCY1HH101J	J	100p 50V Ceramic	AA					
C2062	VCEA0A1AW107M	J	100 10V EL.	AB					
C2063	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA					

Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA526WEE8				
MAIN UNIT				
C2064	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C2201	VCKYCY1HB681K	J 680p	50V Ceramic	AA
C2202	VCCCCY1HH390J	J 39p	50V Ceramic	AA
C2601	VCEA0A1HW476M	J 47	50V EL.	AB
C2602	VCCCCY1HH101J	J 100p	50V Ceramic	AA

RESISTORS*[M-Ox... Metal Oxide, M-Film... Metal Film]*

RJ13	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ14	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ17	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ20	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ24	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ25	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ27	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ32	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ33	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ35	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ39	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ40	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ41	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ46	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ47	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ52	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ53	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ54	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ55	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ56	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ60	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ65	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ66	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ73	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ74	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ77	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ78	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ79	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ80	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ81	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ82	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ83	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ84	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ86	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ87	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ88	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ90	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ94	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ95	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ97	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ98	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
RJ101	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
R57	VRS-CY1JF392J	J 3.9k	1/16W M-Ox.	AA
R201	VRS-CY1JF151J	J 150	1/16W M-Ox.	AA
R202	VRS-CY1JF122J	J 1.2k	1/16W M-Ox.	AA
R203	VRS-CY1JF122J	J 1.2k	1/16W M-Ox.	AA
R204	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R211	VRS-CY1JF331J	J 330	1/16W M-Ox.	AA
R212	VRS-CY1JF000J	J 00	1/16W M-Ox.	AA
R215	VRS-CY1JF222J	J 2.2k	1/16W M-Ox.	AA
R217	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R219	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R220	VRS-CY1JF392J	J 3.9k	1/16W M-Ox.	AA
R225	VRD-RA2BE680J	J 68	1/8W Carbon	AA
R226	VRD-RA2BE101J	J 100	1/8W Carbon	AB

Ref. No.	Part No.	★	Description	Code
R227	VRS-CY1JF333J	J 33k	1/16W M-Ox.	AA
R228	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R229	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
R233	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R234	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R235	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R236	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R307	VRS-CY1JF333J	J 33k	1/16W M-Ox.	AA
R361	VRS-CY1JF224J	J 220k	1/16W M-Ox.	AA
R362	VRD-RA2BE222J	J 2.2k	1/8W Carbon	AA
R363	VRD-RA2BE222J	J 2.2k	1/8W Carbon	AA
R364	VRS-CY1JF561J	J 560	1/16W M-Ox.	AA
R365	VRS-CY1JF561J	J 560	1/16W M-Ox.	AA
R367	VRN-RL3DBR56J+	X 0.56	2W M-Film	AE
R368	VRD-RA2BE222J	J 2.2k	1/8W Carbon	AA
R369	VRD-RA2BE822J	J 8.2k	1/8W Carbon	AA
R371	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R372	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
R415	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R430	VRD-RA2BE331J	J 330	1/8W Carbon	AA
R431	VRS-CY1JF331J	J 330	1/16W M-Ox.	AA
R432	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R440	VRS-CY1JF000J	J 00	1/16W M-Ox.	AA
R453	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R454	VRD-RA2BE101J	J 100	1/8W Carbon	AB
R459	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R460	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R461	VRS-CY1JF151J	J 150	1/16W M-Ox.	AA
R462	VRS-CY1JF122J	J 1.2k	1/16W M-Ox.	AA
R463	VRS-CY1JF474J	J 470k	1/16W M-Ox.	AA
R464	VRS-CY1JF122J	J 1.2k	1/16W M-Ox.	AA
R465	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R471	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
R472	VRS-CY1JF821J	J 820	1/16W M-Ox.	AA
R473	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R474	VRS-CY1JF471J	J 470	1/16W M-Ox.	AA
R475	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R476	VRS-CY1JF393J	J 39k	1/16W M-Ox.	AA
R477	VRS-CY1JF182J	J 1.8k	1/16W M-Ox.	AA
R478	VRS-CY1JF151J	J 150	1/16W M-Ox.	AA
R479	VRS-CY1JF393J	J 39k	1/16W M-Ox.	AA
R480	VRS-CY1JF273J	J 27k	1/16W M-Ox.	AA
R481	VRS-CY1JF152J	J 1.5k	1/16W M-Ox.	AA
R482	VRD-RA2BE101J	J 100	1/8W Carbon	AB
R483	VRS-CY1JF471J	J 470	1/16W M-Ox.	AA
△ R501	VRN-RL3ABR56J	J 0.56	1W M-Film	AA
R510	VRD-RA2BE471J	J 470	1/8W Carbon	AA
R511	VRD-RA2BE393J	J 39k	1/8W Carbon	AA
R512	VRD-RA2BE683J	J 68k	1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA526WEE8					or				
MAIN UNIT					RR-DZ0048CEZZ				
R513	VRS-CY1JF273J	J	27k 1/16W	M-Ox. AA	R751	VRS-CY1JF473J	J	47k 1/16W	M-Ox. AA
R514	VRS-CY1JF101J	J	100 1/16W	M-Ox. AA	R766	VRS-CY1JF333J	J	33k 1/16W	M-Ox. AA
R520	VRS-CY1JF184J	J	180k 1/16W	M-Ox. AA	R767	VRS-CY1JF273J	J	27k 1/16W	M-Ox. AA
R523	VRN-RL3DB1R0J+	X	1 1/2W	M-Film AE	R768	VRS-CY1JF332J	J	3.3k 1/16W	M-Ox. AA
R524	VRS-RG3AB391J	X	390 1W	M-Ox. AE	R769	VRS-CY1JF103J	J	10k 1/16W	M-Ox. AA
R534	VRD-RA2BE181J	J	180 1/8W	Carbon AA	R770	VRD-RM2HD823J	J	82k 1/2W	Carbon AA
R551	VRS-CY1JF562F	J	5.6k 1/16W	M-Ox. AA	R771	VRD-RA2BE272J	J	2.7k 1/8W	Carbon AA
R578	VRD-RA2BE123J	J	12k 1/8W	Carbon AA	R772	VRS-CY1JF103J	J	10k 1/16W	M-Ox. AA
R601	VRD-RM2HD220J	J	22 1/2W	Carbon AA	R774	VRS-CY1JF393J	J	39k 1/16W	M-Ox. AA
△ R604	VRS-KA3NG182J	J	1.8k 7W	M-Ox. AA	R775	VRS-CY1JF563J	J	56k 1/16W	M-Ox. AA
R605	VRD-RM2HD331J	J	330 1/2W	Carbon AA	R776	VRN-VV3DB3R3J	J	3.3 2W	M-Film AB
R606	VRD-RM2HD331J	J	330 1/2W	Carbon AA	R777	VRS-KA3HG8R2K	J	8.2 5W	M-Ox. AD
R609	VRS-RG3AB562J	X	5.6k 1W	M-Ox. AE	R778	VRS-VV3AB101J	J	100 1W	M-Ox. AA
△ R611	VRW-KQ41C3R3K	J	3.3 15W	Cement AG	R779	VRS-CY1JF273J	J	27k 1/16W	M-Ox. AA
R612	VRS-CY1JF472J	J	4.7k 1/16W	M-Ox. AA	R789	VRS-CY1JF394J	J	390k 1/16W	M-Ox. AA
R613	VRS-CY1JF474J	J	470k 1/16W	M-Ox. AA	R801	VRS-CY1JF333J	J	33k 1/16W	M-Ox. AA
R614	VRS-CY1JF395J	J	3.9M 1/16W	M-Ox. AA	R802	VRS-CY1JF101J	J	100 1/16W	M-Ox. AA
▲▲ R616	VRD-RA2BE103J	J	10k 1/8W	Carbon AA	R804	VRS-CY1JF102J	J	1k 1/16W	M-Ox. AA
▲▲ R617	VRS-CY1JF103J	J	10k 1/16W	M-Ox. AA	R805	VRS-CY1JF272J	J	2.7k 1/16W	M-Ox. AA
▲▲ R618	VRS-CY1JF473J	J	47k 1/16W	M-Ox. AA	R806	VRS-CY1JF681J	J	680 1/16W	M-Ox. AA
▲ R621	VRN-RL3AB2R7J	X	2.7 1W	M-Film AE	R807	VRS-CY1JF681J	J	680 1/16W	M-Ox. AA
▲ R622	VRN-RL2HCR47J	J	0.47 1/2W	M-Film	R808	VRS-CY1JF681J	J	680 1/16W	M-Ox. AA
	or				R809	VRS-CY1JF471J	J	470 1/16W	M-Ox. AA
▲ R623	VRN-SV2HCR47J	J	2.7 1W	M-Film	R810	VRD-RA2BE101J	J	100 1/8W	Carbon AB
▲ R624	VRS-RG3DB332J	X	3.3k 2W	M-Ox. AE	R811	VRD-RA2BE101J	J	100 1/8W	Carbon AB
R625	VRD-RA2BE102J	J	1k 1/8W	Carbon AA	R812	VRS-CY1JF224J	J	220k 1/16W	M-Ox. AA
R627	VRS-KT3LB471J	J	470 3W	M-Ox. AD	R813	VRD-RA2BE271J	J	270 1/8W	Carbon AA
R631	VRS-RG3AB103J	J	10k 1W	M-Ox. AB	R814	VRD-RA2BE101J	J	100 1/8W	Carbon AB
R633	VRD-RA2EE683J	J	68k 1/4W	Carbon AA	R815	VRD-RA2BE101J	J	100 1/8W	Carbon AB
R635	VRD-RA2EE223J	J	22k 1/4W	Carbon AA	R816	VRS-CY1JF272J	J	2.7k 1/16W	M-Ox. AA
R647	VRS-SV2HC220J	J	22 1/2W	M-Ox. AA	R817	VRS-CY1JF272J	J	2.7k 1/16W	M-Ox. AA
▲▲ R651	VRN-RL2HC1R0J	X	1 1/2W	M-Film AE	R818	VRS-CY1JF272J	J	2.7k 1/16W	M-Ox. AA
▲▲ R652	VRD-RA2EE103G	J	10k 1/4W	Carbon AA	R819	VRS-CY1JF101J	J	100 1/16W	M-Ox. AA
▲▲ R653	VRD-RA2EE562G	J	5.6k 1/4W	Carbon AA	R820	VRS-CY1JF101J	J	100 1/16W	M-Ox. AA
▲▲ R654	VRD-RA2EE393G	X	39k 1/4W	Carbon AE	R821	VRS-CY1JF101J	J	100 1/16W	M-Ox. AA
R655	VRS-CY1JF562J	J	5.6k 1/16W	M-Ox. AA	R822	VRD-RA2BE101J	J	100 1/8W	Carbon AB
R656	VRS-CY1JF224J	J	220k 1/16W	M-Ox. AA	R830	VRD-RA2BE102J	J	1k 1/8W	Carbon AA
▲ R658	VRS-VV3DB123J	J	12k 2W	M-Ox. AA	R901	VRS-CY1JF104J	J	100k 1/16W	M-Ox. AA
R659	VRS-CY1JF471J	J	470 1/16W	M-Ox. AA	R902	VRS-CY1JF104J	J	100k 1/16W	M-Ox. AA
R664	VRS-CY1JF471J	J	470 1/16W	M-Ox. AA	R903	VRS-CY1JF102J	J	1k 1/16W	M-Ox. AA
R666	VRS-CY1JF223J	J	22k 1/16W	M-Ox. AA	R904	VRS-CY1JF683J	J	68k 1/16W	M-Ox. AA
R667	VRS-CY1JF562J	J	5.6k 1/16W	M-Ox. AA	R905	VRS-CY1JF223J	J	22k 1/16W	M-Ox. AA
R668	VRD-RA2BE680J	J	68 1/8W	Carbon AA	R906	VRS-CY1JF392J	J	3.9k 1/16W	M-Ox. AA
R669	VRS-CY1JF103J	J	10k 1/16W	M-Ox. AA	R907	VRS-CY1JF182J	J	1.8k 1/16W	M-Ox. AA
R670	VRD-RM2HD563J	J	56k 1/2W	Carbon AA	R909	VRS-CY1JF102J	J	1k 1/16W	M-Ox. AA
▲ R671	VRS-RG2HC102J	J	1k 1/2W	M-Ox. AA	R910	VRD-RA2BE102J	J	1k 1/8W	Carbon AA
R672	VRD-RM2HD393J	J	39k 1/2W	Carbon AA	R911	VRS-CY1JF683J	J	68k 1/16W	M-Ox. AA
R699	VRS-CY1JF822J	J	8.2k 1/16W	M-Ox. AA	R912	VRS-CY1JF223J	J	22k 1/16W	M-Ox. AA
▲ R702	VRW-KQ4AC1R2K	J	1.2 10W	Cement AE	R913	VRS-CY1JF392J	J	3.9k 1/16W	M-Ox. AA
R705	VRN-RL3DBR22J	J	0.22 2W	M-Film AA	R914	VRS-CY1JF182J	J	1.8k 1/16W	M-Ox. AA
R706	VRN-RL3DBR22J	J	0.22 2W	M-Film AA	R915	VRS-CY1JF102J	J	1k 1/16W	M-Ox. AA
R707	VRD-RM2HD270J	J	27 1/2W	Carbon AA	R916	VRS-CY1JF683J	J	68k 1/16W	M-Ox. AA
R709	VRD-RA2BE223J	J	22k 1/8W	Carbon AA	R917	VRS-CY1JF000J	J	0 1/16W	M-Ox. AA
R710	VRS-RG2HC103J	J	10k 1/2W	M-Ox. AA	R918	VRS-CY1JF000J	J	0 1/16W	M-Ox. AA
R712	VRD-RA2BE100J	J	10 1/8W	Carbon AA	R922	VRD-RA2BE102J	J	1k 1/8W	Carbon AA
R713	VRS-RG2HC122J+	X	1.2k 1/2W	M-Ox. AE	R923	VRD-RA2BE102J	J	1k 1/8W	Carbon AA
R714	VRD-RM2HD100J	J	10 1/2W	Carbon AA	R924	VRS-CY1JF750J	J	75 1/16W	M-Ox. AA
R715	VRD-RA2BE470J	J	47 1/8W	Carbon AA	R925	VRS-CY1JF750J	J	75 1/16W	M-Ox. AA
R718	VRD-RA2BE102J	J	1k 1/8W	Carbon AA	R926	VRS-CY1JF750J	J	75 1/16W	M-Ox. AA
R723	VRN-RL3DBR22J	J	0.22 2W	M-Film AA	R927	VRS-CY1JF750J	J	75 1/16W	M-Ox. AA
▲ R725	VRD-RM2HD821J	J	820 1/2W	Carbon AA	R928	VRS-CY1JF750J	J	75 1/16W	M-Ox. AA
R726	VRD-RM2HD122J	J	1.2k 1/2W	Carbon AA					
▲ R737	VRN-RL3DBR56J	J	0.56 2W	M-Film					
R744	VRS-CY1JF272J	J	2.7k 1/16W	M-Ox. AA					
R745	VRS-CY1JF272J	J	2.7k 1/16W	M-Ox. AA					
R746	VRS-CY1JF103J	J	10k 1/16W	M-Ox. AA					
R747	VRS-CY1JF103J	J	10k 1/16W	M-Ox. AA					
▲ R750	RR-DZ0049CEZZ	J	3.9M 1/2W	Solid AB					

Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA526WEE8				
MAIN UNIT				
R940	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
R950	VRS-CY1JF750J	J 75	1/16W M-Ox.	AA
R951	VRS-CY1JF750J	J 75	1/16W M-Ox.	AA
R952	VRD-RA2BE333J	J 33k	1/8W Carbon	AA
R961	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
R962	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
R963	VRD-RA2BE331J	J 330	1/8W Carbon	AA
R969	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
R989	VRS-CY1JF750J	J 75	1/16W M-Ox.	AA
R991	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R992	VRS-CY1JF122J	J 1.2k	1/16W M-Ox.	AA
▲△ R2001	VRS-CY1JF562J	J 5.6k	1/16W M-Ox.	AA
R2002	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R2004	VRD-RA2BE101J	J 100	1/8W Carbon	AB
▲△ R2007	VRS-CY1JF562J	J 5.6k	1/16W M-Ox.	AA
R2008	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
▲△ R2009	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R2010	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R2011	VRD-RA2BE561J	J 560	1/8W Carbon	AA
R2013	VRD-RA2BE822J	J 8.2k	1/8W Carbon	AA
▲△ R2016	VRS-CY1JF104J	J 100k	1/16W M-Ox.	AA
R2022	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R2024	VRS-CY1JF472J	J 4.7k	1/16W M-Ox.	AA
R2025	VRS-CY1JF472J	J 4.7k	1/16W M-Ox.	AA
R2026	VRS-CY1JF472J	J 4.7k	1/16W M-Ox.	AA
R2027	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R2028	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R2029	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R2040	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R2041	VRS-CY1JF333J	J 33k	1/16W M-Ox.	AA
R2042	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R2043	VRS-CY1JF333J	J 33k	1/16W M-Ox.	AA
R2045	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R2047	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
R2048	VRS-CY1JF562J	J 5.6k	1/16W M-Ox.	AA
R2051	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R2052	VRD-RA2BE101J	J 100	1/8W Carbon	AB
R2054	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
R2055	VRS-CY1JF682J	J 6.8k	1/16W M-Ox.	AA
R2060	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
R2061	VRS-CY1JF562J	J 5.6k	1/16W M-Ox.	AA
R2063	VRS-CY1JF222J	J 2.2k	1/16W M-Ox.	AA
R2064	VRS-CY1JF332J	J 3.3k	1/16W M-Ox.	AA
R2066	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R2067	VRD-RA2BE222J	J 2.2k	1/8W Carbon	AA
R2081	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R2084	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R2101	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R2102	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R2201	VRS-CY1JF222J	J 2.2k	1/16W M-Ox.	AA
R2202	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R2203	VRS-CY1JF184J	J 180k	1/16W M-Ox.	AA
R2211	VRS-CY1JF222J	J 2.2k	1/16W M-Ox.	AA
R2212	VRS-CY1JF682J	J 6.8k	1/16W M-Ox.	AA
R2213	VRS-CY1JF333J	J 33k	1/16W M-Ox.	AA
R2401	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R2402	VRD-RA2BE101J	J 100	1/8W Carbon	AB
R2403	VRD-RA2BE101J	J 100	1/8W Carbon	AB
R2404	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
R2501	VRS-CY1JF183J	J 18k	1/16W M-Ox.	AA
R2502	VRS-CY1JF183J	J 18k	1/16W M-Ox.	AA
R2503	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R2504	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
R2505	VRS-CY1JF822J	J 8.2k	1/16W M-Ox.	AA

Ref. No.	Part No.	★	Description	Code
R2506	VRS-CY1JF822J	J 8.2k	1/16W M-Ox.	AA
R2507	VRS-CY1JF183J	J 18k	1/16W M-Ox.	AA
R2508	VRS-CY1JF183J	J 18k	1/16W M-Ox.	AA
R2601	VRD-RA2BE470J	J 47	1/8W Carbon	AA
R2603	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
R2605	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
SWITCHES				
S2501	QSW-K0003AJZZ	J Power		AB
	or			
	QSW-K0079GEZZ			
	or			
	QSW-K0202PEZZ			
S2502	QSW-K0003AJZZ	J Menu		AB
	or			
	QSW-K0079GEZZ			
	or			
	QSW-K0202PEZZ			
S2503	QSW-K0003AJZZ	J VOL-Down		AB
	or			
	QSW-K0079GEZZ			
	or			
	QSW-K0202PEZZ			
S2504	QSW-K0003AJZZ	J VOL-Up		AB
	or			
	QSW-K0079GEZZ			
	or			
	QSW-K0202PEZZ			
S2505	QSW-K0003AJZZ	J CH-Down		AB
	or			
	QSW-K0079GEZZ			
	or			
	QSW-K0202PEZZ			
S2506	QSW-K0003AJZZ	J CH-Up		AB
	or			
	QSW-K0079GEZZ			
	or			
	QSW-K0202PEZZ			
MISCELLANEOUS PARTS				
△ RY701	RRLYJ0081CEZZ	J Relay		AL
	or			
	RRLYJ0094CEZZ			
△ F701	QFS-B4023CEZZ	J Fuse, 4A/125V		AC
FH701	QFSDH1013CEZZ	J Fuse Holder		AC
FH702	QFSDH1014CEZZ	J Fuse Holder		AC
FB601	RBLN-0047CEZZ	J Ferrite Bead		AB
FB702	RBLN-0020CEZZ	J Ferrite Bead		AB
FB706	RBLN-0037CEZZ	J Ferrite Bead		AB
FB707	RBLN-0037CEZZ	J Ferrite Bead		AB
J901	QTANJ0540CEZZ	X AV Terminal		AH
J902	QTANJ0655CEZZ	J Terminal,		AK
		COMPONENT/INPUT3		
J904	QJAKG0074CEZZ	J Jack, INPUT-2		AF
J921	QSOCD0430CEZZ	J Socket, S-VIDEO		AE
P52	QPLGN0160CEZZ	J Plug		AB
P361	QPLGN0461CEZZ	J Plug, 4-pin(S)		AB
P401	QPLGN0861CEZZ	J Plug, 8-pin(GBN)		AC
P601	QPLGN0160FJZZ	J Plug, 5-pin(K)		AD
P621	QPLGN0761CEZZ	J Plug, 7-pin(YBN)		AD
P651	QPLGN0361CEZZ	J Plug, 3-pin(P651-3)		AB
P701	QPLGN0260CEZZ	J Plug, 2-pin(M)		AC
P703	QPLGN0269GEZZ	J Plug, 2-pin		AB
P705	QPLGN0160CEZZ	J Plug, 1-pin(SG)		AB
P706	QTiPM0083CEZZ	J Tip		AB
P1301	QPLGN0561CEZZ	J Plug, 5-pin(EJ)		AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA526WEE8 MAIN UNIT					PWB-B: DUNTKA527WEB9 CRT UNIT				
					INTEGRATED CIRCUIT				
					△ IC850	VHiTDA6103Q-1	J	TDA6103Q/N3	AL
					TRANSISTORS				
P1901	QPLGN1559REZZ	X	Plug, 15-pin(VA)	AF	Q850	VS2SA1266-Y-1	J	2SA1266-Y	AA
P1902	QPLGN1559REZZ	X	Plug, 15-pin(VB)	AF	Q851	VS2SC3198-G-1	J	2SC3198-G	AA
P1903	QPLGN1059REZZ	J	Plug, 10-pin(VC)	AC	Q1504	VS2SC3198-G-1	J	2SC3198-G	AA
P2401	QPLGN0561CEZZ	J	Plug, 5-pin	AB	Q1505	VS2SA1266-Y-1	J	2SA1266-Y	AA
SC3001	QSOCN0259FJ00	J	Socket, 10-pin(EA)	AE	Q1506	VS2SA1964E/-1	J	2SA1964E	AF
RMC2601	RRMCU0222CEZZ	J	R/C Receiver	AL	Q1507	VS2SC5248E/-1	J	2SC5248E	AE
	or				DIODES				
	RRMCU0235CEZZ				D853	RH-EX0647GEZZ	J	Zener Diode, 15V	AA
RDA361	PRDAR0108GJFW		Heat Sink, for IC361			or			
RDA501	PRDAR0113GJFW		Heat Sink, for IC501			RH-EX0417GEZZ			
RDA602	PRDAR0114GJFW	X	Heat Sink, for Q602	AH	D854	VHD1SS119/-1	J	Diode	AB
RDA701	PRDAR0112GJFW		Heat Sink, for Q701		D855	VHD1SS119/-1	J	Diode	AB
RDA751	PRDAR0111GJFW	X	Heat Sink, for IC751	AF	D1502	VHD1SS119/-1	J	Diode	AB
	LHLDW1002PEZZ	R	Holder	AB	D1503	VHD1SS119/-1	J	Diode	AB
	LHLDW1002PEZZ	R	Holder	AB	D1506	RH-DX0487CEZZ	J	Diode	AC
	LX-BZ3049GEFD	J	Screw	AA	D1507	RH-DX0487CEZZ	J	Diode	AC
	LX-BZ3100CEFD	J	Screw	AA	D1510	VHD1SS119/-1	J	Diode	AB
	LX-HZ3007MEFD	X	Screw	AF	CAPACITORS				
	MSPRK0034BMFW	J	Spring	AC	[EL... Electrolytic]				
					C850	VCFYSB2EB823J	J	0.082 250V Mylar	AD
					C851	RC-KZ018JCEZZ	J	0.01 AC250V Ceramic	AC
						or			
						RC-KZ015JCEZZ			
					C852	VCEA0A1CW227M	J	220 16V EL.	AC
					C853	VCFYFA1HA224J	J	0.22 50V Mylar	AB
					C854	VCEA0A1CW227M	J	220 16V EL.	AC
					C855	VCEA0A2EW106M	J	10 250V EL.	AD
					C856	VCEA0A1CW106M	J	10 16V EL.	AB
					C1501	VCEA0A1EW476M	J	47 25V EL.	AB
					C1506	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
					C1508	VCKYPA2HB472K	J	4700p 500V Ceramic	AB
					C1509	VCKYPA1HB472K	J	4700p 50V Ceramic	AA
					C1510	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
					C1511	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
					C1515	VCEA0A1EW476M	J	47 25V EL.	AB
					C1516	VCEA0A1EW476M	J	47 25V EL.	AB
					C1517	VCEA0A2AW106M	J	10 100V EL.	AC
					C1518	VCCSPA2HL560K	J	56p 500V Ceramic	AA
					C1519	VCEA0A2CW106M	J	10 160V EL.	AD
					RESISTORS				
					[M-Ox... Metal Oxide]				
					R850	VRS-SV2HC152J	J	1.5k 1/2W M-Ox.	AA
					R851	VRS-SV2HC152J	J	1.5k 1/2W M-Ox.	AA
					R852	VRS-SV2HC152J	J	1.5k 1/2W M-Ox.	AA
					△ R853	VRS-SV2HC272J	J	2.7k 1/2W M-Ox.	AA
					△ R854	VRS-SV2HC272J	J	2.7k 1/2W M-Ox.	AA
					△ R855	VRS-SV2HC272J	J	2.7k 1/2W M-Ox.	AA
					R856	VRD-RM2HD124J	J	120k 1/2W Carbon	AA
					R857	VRD-RM2HD124J	J	120k 1/2W Carbon	AA
					R858	VRD-RM2HD124J	J	120k 1/2W Carbon	AA
					R862	VRC-MA2HG152K	J	1.5k 1/2W Solid	AA
					R863	VRC-MA2HG152K	J	1.5k 1/2W Solid	AA
					R864	VRC-MA2HG152K	J	1.5k 1/2W Solid	AA

Ref. No.	Part No.	★	Description	Code
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PWB-B: DUNTKA527WEB9 CRT UNIT

R867	VRS-SV2HC392J	J	3.9k 1/2W	M-Ox.	AA
R868	VRS-SV2HC332J	J	3.3k 1/2W	M-Ox.	AA
R869	VRD-RA2BE473J	J	47k 1/8W	Carbon	AA
R870	VRD-RA2BE223J	J	22k 1/8W	Carbon	AA
R871	VRD-RA2BE223J	J	22k 1/8W	Carbon	AA
R872	VRD-RA2EE680J	J	68 1/4W	Carbon	AA
R873	VRD-RM2HD224J	J	220k 1/2W	Carbon	AA
R874	VRD-RM2HD184J	J	180k 1/2W	Carbon	AA
R875	VRD-RM2HD184J	J	180k 1/2W	Carbon	AA
R876	VRD-RM2HD184J	J	180k 1/2W	Carbon	AA
R877	VRD-RA2BE103J	J	10k 1/8W	Carbon	AA
△ R878	VRS-SV2HC120J	J	12 1/2W	M-Ox.	AA
R1511	VRD-RA2BE101J	J	100 1/8W	Carbon	AB
△ R1513	VRS-VV3DB561J	J	560 2W	M-Ox.	AA
R1514	VRD-RA2BE100J	J	10 1/8W	Carbon	AA
R1515	VRD-RA2BE820J	J	82 1/8W	Carbon	AA
R1516	VRD-RA2BE820J	J	82 1/8W	Carbon	AA
R1517	VRD-RA2BE122J	J	1.2k 1/8W	Carbon	AA
R1518	VRD-RA2BE683J	J	68k 1/8W	Carbon	AA
R1519	VRD-RA2BE123J	J	12k 1/8W	Carbon	AA
R1520	VRD-RA2BE683J	J	68k 1/8W	Carbon	AA
R1521	VRD-RA2BE122J	J	1.2k 1/8W	Carbon	AA
R1525	VRD-RA2EE560J	J	56 1/4W	Carbon	AA
R1526	VRD-RA2EE560J	J	56 1/4W	Carbon	AA
R1527	VRD-RM2HD1R5J	J	1.5 1/2W	Carbon	AA
R1528	VRD-RM2HD1R5J	J	1.5 1/2W	Carbon	AA
R1529	VRS-VV3DB221J	J	220 2W	M-Ox.	AA
R1530	VRD-RA2BE122J	J	1.2k 1/8W	Carbon	AA

MISCELLANEOUS PARTS

FB1501	RBLN-0020CEZZ	J	Ferrite Bead	AB
P854	QPLGN0741CEZZ	J	Plug, 7-pin (YBN)	AC
P860	QPLGN0841CEZZ	J	Plug, 8-pin (GBN)	AB
P861	QPLGN0241CEZZ	J	Plug, 2-pin (PU)	AA
SC850	QSOCV0937CEZZ	J	CRT Socket	AL
RDA850	PRDAR0248PEFW	R	Heat Sink, for IC850	AF
RDA1506	PRDAR5072CEFW	J	Heat Sink, for Q1506	AC
RDA1507	PRDAR5072CEFW	J	Heat Sink, for Q1507	AC
	LX-BZ3100CEFD	J	Screw	AA

Ref. No.	Part No.	★	Description	Code
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PWB-C: DUNTKA602WEA0 AV UNIT

INTEGRATED CIRCUITS

IC1401	VHiTC90A53F-1	X	I.C.	AV
IC1900	VHiCXA2089Q-1	J	CXA2089Q	AN

TRANSISTORS

Q1401	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q1404	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q1405	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q1406	VS2PB709AR/-1	J	2PB709AR	AB
	or			
	VS2SA812-M51E			
Q1407	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q1408	VS2PB709AR/-1	J	2PB709AR	AB
	or			
	VS2SA812-M51E			
Q1409	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q1907	VS2PD601AR/-1	J	2PD601AR	AB
	or			
	VS2SC1623L61E			
Q1909	VS2PB709AR/-1	J	2PB709AR	AB
	or			
	VS2SA812-M51E			

COILS

L1401	VP-XF100K0000	J	Peaking 10μH	AB
L1402	VP-XF100K0000	J	Peaking 10μH	AB
L1406	VP-XF330K0000	J	Peaking 33μH	AB
L1407	VP-XF220K0000	J	Peaking 22μH	AB
L1408	VP-XF100K0000	J	Peaking 10μH	AB
L1410	VP-XF100K0000	J	Peaking 10μH	AB
L1411	VP-XF100K0000	J	Peaking 10μH	AB
L1413	VP-XF330K0000	J	Peaking 33μH	AB
L1414	VP-XF330K0000	J	Peaking 33μH	AB

CAPACITORS

[EL.... Electrolytic]

C1412	VCEA0A1CW106M	J	10 16V	EL.	AB
C1415	VCCCCY1HH220J	J	22p 50V	Ceramic	AA
C1416	VCEA0A1CW107M	J	100 16V	EL.	AC
C1420	VCCCCY1HH120J	J	12p 50V	Ceramic	AA
C1421	VCCCCY1HH120J	J	12p 50V	Ceramic	AA
C1424	VCCCCY1HH270J	J	27p 50V	Ceramic	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-C: DUNTKA602WEA0					RESISTORS				
AV UNIT					<i>[M-Ox.... Metal Oxide]</i>				
C1428	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ12	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1429	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ13	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1430	VCE9GA1CW106M	J	10 16V EL. (N.P)	AB	RJ14	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1435	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ15	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1436	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA	RJ16	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1439	VCE9GA1CW106M	J	10 16V EL. (N.P)	AB	RJ18	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1440	VCEA0A1CW106M	J	10 16V EL.	AB	RJ19	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1441	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ20	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1442	VCFYFA1HA474J	J	0.47 50V Mylar	AC	RJ21	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1443	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ22	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1444	VCKYCY1HB472K	J	4700p 50V Ceramic	AA	RJ23	VRS-CY1JF000J	J 0	1/16W M-Ox.	AA
C1445	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1401	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
C1446	VCCCCY1HH181J	J	180p 50V Ceramic	AA	R1402	VRS-CY1JF681J	J 680	1/16W M-Ox.	AA
C1447	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1403	VRS-CY1JF332J	J 3.3k	1/16W M-Ox.	AA
C1448	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA	R1404	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
C1449	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA	R1405	VRS-CY1JF471J	J 470	1/16W M-Ox.	AA
C1451	VCEA0A1CW107M	J	100 16V EL.	AC	R1406	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
C1452	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA	R1407	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
C1453	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1420	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
C1454	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1422	VRS-CY1JF473J	J 47k	1/16W M-Ox.	AA
C1455	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1423	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
C1456	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA	R1424	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
C1457	VCEA0A1CW106M	J	10 16V EL.	AB	R1425	VRS-CY1JF221J	J 220	1/16W M-Ox.	AA
C1458	VCEA0A1CW106M	J	10 16V EL.	AB	R1426	VRS-CY1JF391J	J 390	1/16W M-Ox.	AA
C1460	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1427	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
C1470	VCCCCY1HH100D	J	10p 50V Ceramic	AA	R1428	VRS-CY1JF473J	J 47k	1/16W M-Ox.	AA
C1473	VCCCCY1HH100D	J	10p 50V Ceramic	AA	R1429	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
C1474	VCCCCY1HH150J	J	15p 50V Ceramic	AA	R1430	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
C1900	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R1431	VRS-CY1JF122J	J 1.2k	1/16W M-Ox.	AA
C1901	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R1432	VRS-CY1JF331J	J 330	1/16W M-Ox.	AA
C1903	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R1433	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
C1904	VCEA0A1HW105M	J	1 50V EL.	AB	R1434	VRS-CY1JF471J	J 470	1/16W M-Ox.	AA
C1905	VCEA0A1HW105M	J	1 50V EL.	AB	R1435	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
C1906	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R1456	VRS-CY1JF564J	J 560k	1/16W M-Ox.	AA
C1907	VCEA0A1HW105M	J	1 50V EL.	AB	R1457	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
C1908	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1458	VRD-RA2BE103J	J 10k	1/8W Carbon	AA
C1909	VCEA0A1HW105M	J	1 50V EL.	AB	R1459	VRS-CY1JF821J	J 820	1/16W M-Ox.	AA
C1910	VCEA0A1HW105M	J	1 50V EL.	AB	R1462	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
C1911	VCEA0A1HW105M	J	1 50V EL.	AB	R1466	VRS-CY1JF123J	J 12k	1/16W M-Ox.	AA
C1912	VCEA0A1HW105M	J	1 50V EL.	AB	R1467	VRS-CY1JF822J	J 8.2k	1/16W M-Ox.	AA
C1913	VCEA0A1HW105M	J	1 50V EL.	AB	R1900	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
C1914	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R1930	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
C1915	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1932	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
C1916	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R1935	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
C1921	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R1936	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
C1922	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA	R1937	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
C1923	VCEA0A1CW107M	J	100 16V EL.	AC	R1938	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
C1926	VCEA0A1CW226M	J	22 16V EL.	AB	R1941	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
C1927	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R1942	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
C1928	VCEA0A1HW105M	J	1 50V EL.	AB	R1943	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
C1929	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R1944	VRS-CY1JF223J	J 22k	1/16W M-Ox.	AA
C1937	VCEA0A1HW105M	J	1 50V EL.	AB	R1945	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
C1938	VCEA0A1HW105M	J	1 50V EL.	AB	R1946	VRS-CY1JF103J	J 10k	1/16W M-Ox.	AA
C1939	VCEA0A1HW105M	J	1 50V EL.	AB	R1954	VRD-RA2BE221J	J 220	1/8W Carbon	AA
C1951	VCKYCY1HB681K	J	680p 50V Ceramic	AA	R1955	VRD-RA2BE221J	J 220	1/8W Carbon	AA
					R1956	VRS-CY1JF222J	J 2.2k	1/16W M-Ox.	AA
					R1957	VRD-RA2BE101J	J 100	1/8W Carbon	AB
					R1958	VRS-CY1JF101J	J 100	1/16W M-Ox.	AA
					R1959	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
					R1960	VRD-RA2BE101J	J 100	1/8W Carbon	AB
					R1962	VRD-RA2BE101J	J 100	1/8W Carbon	AB
					R1964	VRD-RA2BE101J	J 100	1/8W Carbon	AB
					R1965	VRS-CY1JF222J	J 2.2k	1/16W M-Ox.	AA
					R1966	VRS-CY1JF102J	J 1k	1/16W M-Ox.	AA
					R1971	VRD-RA2BE101J	J 100	1/8W Carbon	AB
					R1972	VRD-RA2BE101J	J 100	1/8W Carbon	AB
					MISCELLANEOUS PARTS				
					P1904	QPLGN0641CEZZ	J	Plug, 6-pin(EJ)	AB
					SC1901	QSOEN1598REZZ	J	Socket, 15-pin(VA)	
					SC1902	QSOEN1598REZZ	J	Socket, 15-pin(VB)	
					SC1903	QSOEN1098REZZ	J	Socket, 10-pin(VC)	AC
					SLD1901	PSLDM0102GJFW	J	Shield	

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-S: DUNTKB224WEA2 MTS MODULE UNIT					MISCELLANEOUS PARTS				
INTEGRATED CIRCUITS					△ ACC701	QACCD3065CESA	J	AC Cord	AN
IC3001 VHiCXA2074Q-1 J CXA2074Q AY					or				
CAPACITORS					SP1	QACCD4001WJSA		Speaker(L), 8 ohm	AE
<i>[EL.... Electrolytic]</i>					SP1	VSP9050PB368A		Speaker(R), 8 ohm	AE
C3001	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB		LHLDK0014PEZZ	R	AC Cord Holder	AD
C3002	VCKYCY1HB562K	J	5600p 50V Ceramic	AA		LHLDW1002PEZZ	R	Wire Holder, x3	AB
C3003	VCQYTA1HM123J	J	0.012 50V Mylar	AA		LHLDW1002PEZZ	R	Wire Holder	AB
C3004	VCEA0A1HW105M	J	1 50V EL.	AB		LHLDW1003PEZZ	R	Wire Holder, x3	AA
C3005	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB		LHLDW1033PEZZ	R	Wire Holder, x2	AA
C3006	VCEA0A1HW106M	J	10 50V EL.	AB		LHLDW1037PEZZ	R	AC Cord Holder	AB
C3007	VCEA0A1HW475M	J	4.7 50V EL.	AB		LHLDW1060CEZZ	J	Wire Holder, x3	AB
C3008	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA		LHLDZ1037MEZZ	X	Anode Clamp Holder, x2	AD
C3009	VCEA0A1CW227M	J	220 16V EL.	AC		LX-TZ0104GJFD	X	CRT Screw, x4	AF
C3010	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB		LX-TZ3004CEFD	J	Screw, x4	AA
C3011	VCEA0A1HW475M	J	4.7 50V EL.	AB		LX-WZ0115GJFD		CRT Washer, x4	AB
C3012	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB		PSPAH0110GJ00		Spacer, x3	AB
C3013	VCKYCY1HB272K	J	2700p 50V Ceramic	AA		PSPAN0103GJZZ		Spacer	AB
C3014	VCQYTA1HM473J	J	0.047 50V Mylar	AA		QCNW-0133GJZZ		Connecting Cord(YBN)	AC
C3015	VCEACA1HC335K	J	3.3 50V EL.	AC		QCNW-0134GJZZ		Connecting Cord(GBN)	AC
C3016	VCE9GA1HW475M	J	4.7 50V EL. (N.P)	AB		QCNW-0136GJZZ		Connecting Cord(S)	AC
C3017	VCEACA1CC106K	J	10 16V EL.	AC		QCNW-0165GJZZ		Connecting Cord(EJ)	AC
C3018	VCEA0A1HW105M	J	1 50V EL.	AB		QCNW-0167GJZZ		Connecting Cord	AC
C3029	VCQYTA1HM682J	J	6800p 50V Mylar	AB		QCNW-A381WJZZ	X	Connecting Cord(TA)	AG
C3030	VCQYTA1HM682J	J	6800p 50V Mylar	AB		QCNW-A382WJZZ	X	Connecting Cord(SG1)	AF
C3031	VCQYTA1HM473J	J	0.047 50V Mylar	AA		QCNW-A383WJZZ	X	IF Cable	AH
C3032	VCQYTA1HM473J	J	0.047 50V Mylar	AA		QCNW-A476WJZZ		Connecting Cord	AC
RESISTORS						TCAUH3045GJZZ		Caution Card	AD
<i>[M-Ox.... Metal Oxide]</i>						TLABM0002GJZZ	X	Model Label	AB
R3001	VRD-RA2BE221J	J	220 1/8W Carbon	AA		TLABZ0152GJZZ	X	Feature Label	AD
R3002	VRD-RA2BE221J	J	220 1/8W Carbon	AA		XTASD30P12000	J	Screw	AA
R3003	VRS-CY1JF105J	J	1M 1/16W M-Ox.	AA		XTASD30P12000	J	Screw, x4	AA
R3004	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA		XTASD40P20000	J	Screw	AA
R3005	VRS-CY1JF623J	J	62k 1/16W M-Ox.	AA	SUPPLIED ACCESSORIES				
R3007	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA		RRMCGA035WJSB		Infrared R/C Unit	AR
R3008	VRS-CY1JF302J	J	3k 1/16W M-Ox.	AA		TGAN-0001GJZZ	X	Guarantee Card	AB
R3010	VRS-CY1JF392J	J	3.9k 1/16W M-Ox.	AA		TiNS-A180WJZZ		Operation Manual	AZ
R3011	VRS-CY1JF102J	J	1k 1/16W M-Ox.	AA		QCNW-0236MEZZ		RF Cable	AF
R3012	VRS-CY1JF102J	J	1k 1/16W M-Ox.	AA	MISCELLANEOUS PARTS				
P3001 QPLGN0242FJ00 J Plug, 10-pin(EA) AE									

Ref. No.	Part No.	★	Description	Code
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PACKING PARTS
(NOT REPLACEMENT ITEM)

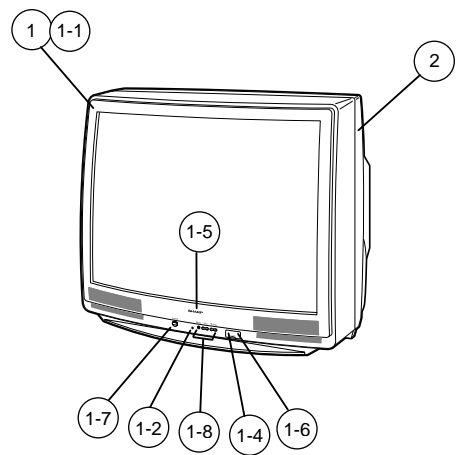
SPAKCA100WJZZ	—	Packing Case	—
SPAKP0109GJZZ	—	Wrapping Paper	—
SPAKX0134GJZZ	—	Buffer Material	—
SSAKA0101GJZZ	—	Polyethylene Bag	—
TLABZA058WJZZ	—	Carton Label	—

Ref. No.	Part No.	★	Description	Code
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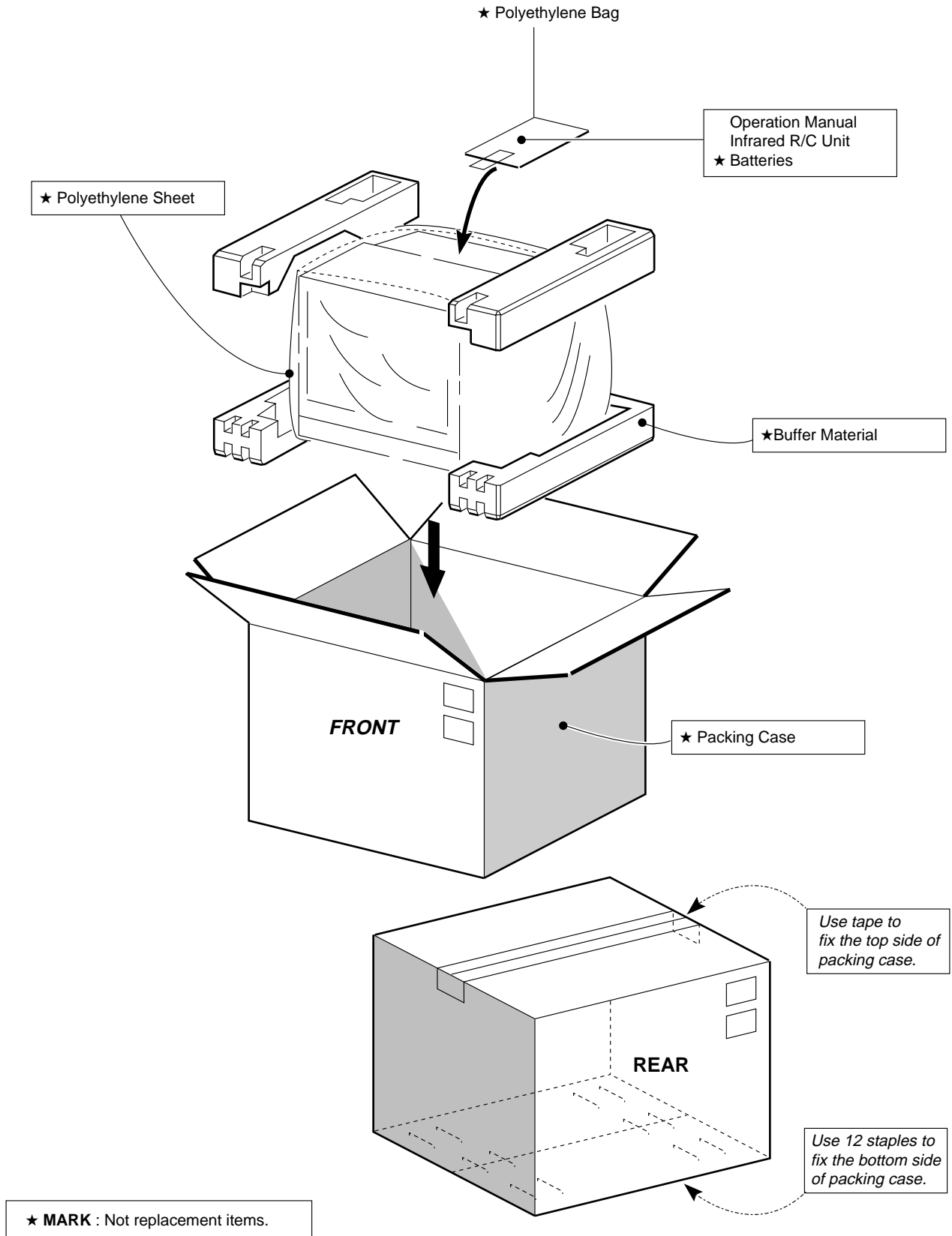
CABINET PARTS

1	CCABAA060WEH0	Front Cabinet Ass'y	BD
1-1	<i>Not Available</i>	Front Cabinet	—
1-2	GCOVA0121GJSA	RC, LED Cover	AC
1-3	GDORFA004WJSA	Door	AC
1-4	GCOVA0116GJKA	Door Cover	AC
1-5	HBDGB1009MESB	Badge, "SHARP"	AG
1-6	HiNDP0105GJKZ	Indication Plate	AB
1-7	JBTN-0138GJKB	Button, Power	AF
1-8	JBTN-0139GJSB	Button, CH-Up/Down, VOL-Up/Down, Menu	AF
2	GCABBA0154GJKA	Rear Cabinet	BE

CABINET PARTS LOCATION



PACKING OF THE SET



SHARP

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